PHILADELPHIA MEDICAL TIMES.

PHILADELPHIA, SEPTEMBER 29, 1877.

ORIGINAL LECTURES.

CLINICAL LECTURE ON TRAUMATISM OF THE BRAIN.

Delivered at the University Hospital

BY PROFESSOR H. C. WOOD.

Reported by CHARLES K. MILLS, M.D., Chief of Clinic for Nervous Diseases.

GENTLEMEN,—As you well know, an injury to the head may produce concussion or compression of the brain. Without entering into a lengthy discussion of these conditions, I wish to warn you that, as an absolute diagnosis between the two conditions often cannot be made, it is imperative on you to give a guarded prognosis.

When compression exists, the case may be one of traumatic apoplexy, and, if so, is almost invariably meningeal in character. The brain will be found after death covered with clots. It may, however, happen that the clot is so small that the patient recovers from its effects without active symptoms. You can readily see that if the clot be very thin and circumscribed it may not produce marked symptoms. The upper circumference of the brain is wonderfully insensitive. I have seen a localized clot the size of a pigeon's egg form without manifesting its presence until secondary softening occurred.

After concussion, the result is usually recovery, but inflammation may be set up. The symptoms of concussion are probably due to a disturbance of the molecular elements of the brain by the vibrations caused by the blow, and this disturbance may be so severe as to cause organic results. It is very plain why it is that concussion is liable to be succeeded by inflammation. This may be of two kinds, namely, encephalitis or meningitis. If you examine a brain after concussion, and discover a recent encephalitis, you will find in the affected portion an increase in the number of the white blood-cells, and a rapid augmentation of the elements of the neuroglia or connective tissue, the nerve elements proper not taking much part in the earlier stages of the affection. A little later, as the result of a sort of fatty degeneration, the nerve elements disappear, and the well-known large, round, granular cells or corpuscles become abundant. This is the condition often spoken of as red softening. The same granular cells are found in white softening, but they are not formed so early.

Whenever you have concussion of serious import, look for the symptoms which indicate inflammation. These often come on so insidiously as to escape attention. One symptom, most important and characteristic, and which must be particularly attended to, is *fever*. Whenever, after a blow on the head, decided fever sets in, acute meningitis or encephalitis almost certainly exists. Sometimes the symptoms are very rapid; and almost directly after the recovery of consciousness, the temperature rises, the pulse becomes irregular, a rapid failure of power occurs, and death takes place, either with or without convulsions, about the fourth or fifth day. Such a case does not offer much hope; but the treatment instituted should be very active. Free venesection, to the point of causing fainting, should be instituted, if it can be endured at all, and if not, local bleeding should be tried.

In the case to which I call your attention especially, the patient was supposed to be suffering from chronic cerebral disease from traumatism. This is more frequently seen than acute disease, such as that of which I have spoken. Chronic disease of the brain following injury develops either as chronic encephalitis or chronic meningitis. Chronic encephalitis of such character is apt to be local; the acute form is more likely to be diffused. The same organic changes are found in the chronic as in the acute condition, but they are developed much more slowly in the former, and progress further because death is longer delayed. A sort of wall is formed around the diseased part, and the breaking down of tissue progresses until a circumscribed abscess results. Chronic abscess of the brain following traumatism is often very insidious in its development. The patient perhaps entirely rallies from the direct effects of the injury, but in a short time something wrong is noticed. He becomes irritable or apathetic, and has almost continuous headache, with occasional exacerbations.

Three more or less well-marked stages of chronic abscess may often be noted. In the

first, the symptoms of the trouble brewing are not very marked or definite; headache, slight fever in the evening, and some malaise may be the only indications. The second stage is one of even more complete latency; but in the third the symptoms become violent. Even in the second and most latent stage the patient usually suffers from headache and a changed mental condition. He is morose and irritable, and his memory is impaired. Very slight symptoms of such a character, following a blow upon the head, should always put you on your guard. If any numbness of the extremities, local palsy, or disordered motility is manifest, the case becomes scarcely doubtful. Remember, however, that the latency may be quite complete. It is quite common for the abscess to remain more or less perfectly hidden for two or three months; cases have been known of two or three years' duration; and I have read of at least one in which the latency was said to have existed for twenty-six years. I doubt, however, in this instance, the connection between the result and the asserted cause.

Instead of chronic encephalitis, chronic meningitis may be produced by violence. The symptoms are similar to those of abscess,—headache, loss of ambition, evidences of intellectual failure, etc. It is usual to say that if localized symptoms, such as affections of the pupil, squint, or local palsies, are present, they point to abscess, just as it is said that if you have aphasia it is evidence of a local lesion in the left anterior lobe about the island of Reil. You cannot always depend on this. I have seen aphasia from meningitis and blocking up of the circulation to the island of Reil, without any absolute lesion of the latter. You may likewise, as I have observed, have local palsies from meningitis. The diagnosis between abscess and meningitis is by no means a certain one; but I think that the meningitis is less likely to be latent than abscess, and that in it the patient suffers more from violent headaches, which are aggravated by bright lights and loud noises. Convulsive seizures are not diagnostic of abscess.

So far as treatment is concerned, it is not of importance to distinguish between the two conditions; but as regards prognosis it is essential to make a correct differential diagnosis, the prognosis in chronic meningitis being much better than in cases of chronic abscess of the brain. The doubt about the diagnosis should always influence the prognosis.

Dr. C., whose brain is on the table before me, presented himself four or five days ago with a letter from a physician, which stated that eighteen months since he had fallen from his buggy, striking upon the right side of his head. He was laid up for a short time from the effects of the concussion. After he got about again, he began to suffer from various symptoms, such as headache, mental apathy, irritability, and loss of strength. He was treated with numerous remedies. Among other things, he was given strychnia for supposed paralysis.

About last Christmas, that is, about four months ago, on arising from the bed in the morning, his wife noticed that he put on his clothes improperly. About this time he complained also of more headache, and shortly afterwards he had an epileptiform seizure. His vision began to be defective; and evidences of mental impairment showed themselves, memory failing. He became unable to attend to practice, and, by direction of his physicians, travelled for his health, the trouble being ascribed to overwork. He did not improve, and had occasional spells of insanity. The diagnosis, when the man came to the hospital a few days since, was narrowed down at once to abscess or meningitis. The ophthalmoscope showed atrophy of the optic nerve, believed to be from descending neuritis. The diagnosis of meningitis was confidently made. The trouble had lasted eighteen months, and it does not seem possible for an abscess to cause an encephalitis so diffused and wide-spread as to involve the optic nerve and yet not kill the patient in a comparatively brief period.

I saw the doctor on Wednesday. He was then quiet and collected. On Thursday he wandered out into the wards, acting somewhat strangely. On Friday he emptied some ice-water into his breakfast, and was heard to say something about jumping out of a window. Two men were at once detailed to watch him; but, as he was lying on the bed, he suddenly jumped to the window-sill, and, although he was caught by one of the attendants, whom he almost carried with him, he sprang out and was instantly killed.

We found, on making a post-mortem examination, a bad fracture and an apoplectic clot, the result of the fatal jump from the window. Decided evidences of chronic meningitis were also discovered; and the diagnosis, so far as chronic meningitis was concerned, was entirely confirmed. If this diagnosis had been made early in the case, and the proper treatment instituted, I believe life would have been saved. He had been treated by different physicians on various hypotheses, and doubtless in some instances with injurious effects, but had never, so far as I could learn, been actively treated for meningitis.

As already stated, the symptoms were believed to have been caused by a traumatism, a clear history of injury being given in the letter brought by the patient. Since his death, however, his wife has come to Philadelphia, and I am now led to believe, from her statements, that the meningitis was not traumatic.

Primary chronic meningitis is almost invariably due in the adult to one of three causes, namely, 1st, traumatism; 2d, syphilis; and 3d, sunstroke.

I believe that the meningitis from which the patient suffered was the result of sunstroke. His wife says that the asserted injury occurred on a very hot day in August. After a prolonged exposure to the sun, he came into the house complaining of feeling very badly, sat down on a chair and stared vacantly before him for some minutes, and then started out again to see his patients. A woman walking in the road noticed him in his carriage, looking straight forward as if unconscious of anything about him. Whilst she was watching, suddenly he was thrown out. He was picked up, and seemed strange and bewildered, but insisted on getting into his buggy, and started off. In a short time he was again thrown or fell out, and was then carried to a hospital. My belief is that the doctor fell out of his carriage. The occurrence was on a smooth village road, and the horse was jogging along in the quietest manner. Something must have led to his falling. A man does not naturally tumble out of a carriage on a smooth road, with a quiet horse, twice in a half-hour; and such a fall on a dirt road is not apt to produce a concussion severe enough to cause insensibility at the time and meningitis afterwards. The opinion that a sunstroke was the original cause of the trouble is confirmed by the fact that the patient was always much worse in hot weather.

The treatment of meningitis following sunstroke or injury should be actively antiphlogistic. Mercury should be used to the extent of touching the gums. Wet cups might be freely resorted to early in the disease, and in some cases, when the symptoms are sufficiently acute, venesection should be employed.

In advanced stages, mercury and iodide of potassium should be used alternately, and the hot iron should be applied to the nape of the neck about every fourth day. The burning should be superficial, and should be just so extensive as to allow of two applications, one being healing while the other is fresh. The patient should be kept quiet, and all mental labor and anxiety and exposure avoided. Stimulants must be avoided also, and the diet should be a spare one.

ORIGINAL COMMUNICATIONS.

FOUR CASES OF CEREBRAL INJURY.

BY C. W. DULLES, M.D.

ALTHOUGH the notes of the following cases of cerebral injury are imperfect, I think they may be of interest, and have some statistical value as well.

The first case is given as one of nearly complete recovery from a fracture at the base of the skull. The second was a fracture of the same class, resulting in recovery of physical but loss of mental functions. The third and fourth are illustrations of the difficulties of diagnosis which may confront one in dealing with the subjects of dangerous blows or falls.

Case I.—David W., æt. 46, came under my care when convalescing from a fracture at the base of the cranium. The surgeon who had treated him from the first had observed the classical array of symptoms, including hemorrhage from the mouth and nose, and satisfied me that such a fracture had existed. At the time of my taking charge he was able to go about, but dragged his left leg in walking, had some impairment of the left arm, and complete paralysis of the third cranial nerve of the left side,—the oculo-motor.

A more beautiful pathological demonstration of the anatomical distribution and physiological functions of this nerve could not be seen. It is well known that the oculo-motor

nerve directs the action of the m. levator palpebræ superioris, as well as all the muscles of the eyeball, except the m. rectus externus and the m. obliquus superior. In addition to this, passing through the ciliary ganglion, it contributes the motor fibres to the sphincter pupillæ, antagonizing the action of the sympathetic upon the dilator pupillæ. As a consequence, there was in the present case, first, complete ptosis, from paralysis of the m. levator palpebræ superioris; second, external strabismus, with a rotation of the eye inward at the upper margin and outward below, with the anterior axis directed downward and outward by the unantagonized action of the m. obliquus superior and the m. rectus externus; together with—third—extreme and persistent dilatation of the pupil.

The diagnosis was, that an organized effusion, resulting from the fracture, existed in the course of the left oculo-motor nerve, or that it had been torn across by the fracture.

The man was treated hygienically as the main assistant to recovery, and, at the same time, was given iodide of potassium in ten-grain doses, largely diluted, three times a day. In the course of two and a half months the ptosis disappeared, because he learned to elevate his eyelid with the m. occipito-frontalis; later the strabismus was corrected without an operation,—which was at one time thought of and to which he consented; but the mydriasis persisted.

The halt in his gait and the weakness of his arm gradually left him also.

At no part of the time that I saw him were his mental faculties impaired.

Case II.—Jacob W., æt. 55, a very large, fat German, fell down a flight of stairs and struck upon his head. When I saw him he was bleeding from the mouth and nose and left ear. Inserting a probe into the ear, I could plainly feel a rough, fractured, bony surface.

The man was at this time in a state of profound depression, comatose, with slow stertorous breathing, slow pulse, cool surface, and partial left-sided hemiplegia.

The first exertions were directed to bringing him out of his state of depression, and later to combat symptoms of cerebral irritation, which set in on the second day, when the hemiplegia disappeared spontaneously. On the third day he regained control of the evacuations of his bladder and rectum. On the fourth day his pulse was 60, and he was disposed to sleep, becoming much irritated when disturbed for any reason. In the afternoon he complained of pain in the left side of his head. His pulse then was 64. After receiving fifteen grains of bromide of potassium he became quiet and easy.

On the fifth day his pulse was 54. The sixth day it had come up to 64 again.

Thus the case continued without the occurrence of any extraordinary phenomena for a month and a half. There was a steady improvement in general, and at the end of that time he was perfectly able to go about and take care of himself. He had, however, lost much flesh,—I suppose not less than fifty pounds,—and was quite thin. His reason was very seriously impaired, and his memory almost worthless.

Case III.—Henry McL., a young Irishman, I found in a low drinking-saloon, with a very hot skin, his face and hands eczematous,—from sunburn, I thought,—in a muttering delirium, having a scalp wound about two inches long over his external occipital protuberance. The history was that about six hours before he had fallen out of a second-story window to the brick pavement below, a distance of about twelve feet, as I saw, and had struck upon his head.

I found that his pupils reacted very slowly. His temperature was 105°, his pulse rapid, and, as stated, he was in a stubborn muttering delirium.

I was at my wits' end to decide what was his chief trouble, sunstroke, alcoholism, or concussion of the brain. There was no fracture of the cranium, and yet no man could have such a fall without sustaining some brain injury. With this as an almost certainty, added to what I thought was evidence enough of a certain amount of sunstroke, the condition of his skin and his extremely high temperature, and the strong presumption of alcoholism, there was an array of factors which made the case as perplexing as it was interesting.

As the man did not seem in danger of depression, I determined to unload his bowels, as well as his bladder, and reduce his temperature. These three ends were secured by means of croton oil, the catheter, and the cold wet pack. At the same time, after having him cupped behind the ears, I had his head shaved and cold applied.

By evening he had purged freely and his temperature had fallen to 98°.

The next morning he was conscious, but stubborn to an incredible degree. Answers to questions could only be secured by pinching his great toe, which always aroused him from his almost ceaseless muttering, and elicited furious protests. His answers to questions were angry and utterly irreconcilable. He soon evinced an inflexible purpose to leave his bed and go out of the house to see "the boys," requiring restraint to keep him where he was.

His treatment was symptomatic and mainly hygienic. For some time following he was found persistently constipated, and required purgatives to keep his digestive track clear. He was very careless about his evacuations, making them without warning, and keeping the attendants busy all the time. When I last saw the patient his physical powers seemed restored to a normal standard, but in giving up the care of him I felt it my duty to say to his parents that I considered him unfit to take

care of himself. Indeed, his mind appeared to be utterly ruined, the phase of insanity being not violent, but imbecile.

What to call this case I could not then and cannot now positively say. Considering the complications, however, it seems to me more like what Mr. Erichsen calls "cerebral irritation" than anything else. True, he says this state "usually follows blows upon the temple or forehead;" but as he thinks they may "arise from" or be "associated with lacerations of the cerebral substance," perhaps we may think it possible such laceration should be caused by the agitation resulting from a violent blow on any firm or resisting portion of the skull, a sort of *contre-coup*, such as is referred to under the head of *Contusion of the Brain.*

Another point of difference in the case from Mr. Erichsen's description of cerebral irritation is in the matter of pulse and temperature, which are there stated to be low: "The surface is pale and cool or even cold. There is no heat of head. The pulse is small, feeble, and slow." But would not the fact of a previous sunstroke account for this difference? What would be the condition of a man who, having been exposed to extreme heat, had been partly overcome, and, in the condition of stupor following, had rolled out of a window and received a violent blow upon the head?

Is it not likely that the concurrence of these two accidents would produce such a picture as we have above?

There seemed in this case no concussion —or, if there was, it passed off very rapidly —nor any compression; there was no fracture, and the phenomena were precisely those described by Mr. Erichsen in his Surgery (Am. ed., vol. i. pp. 449, 450, 1873), with the exceptions alluded to above.

Case IV.—Mary M., æt. 23, having as a domestic stolen some of her mistress's property and being recognized on a train of cars, in order to escape arrest sprang to the ground when the train was going at a rate of about fifteen miles an hour. I saw her first about seventeen hours afterwards. She was then covered with bruises all along her left side, and her face about the mouth and left eye was much swollen. She seemed very stupid and depressed, and I could not get a word or a sign of consciousness from her.

On examination, no fracture of cranium or spine was found, nor of any other bone. Her legs were rigid, her fingers were firmly flexed over the thumbs. Her urine was found to be clear. Her pulse was 112. Her face was leeched, and she was ordered careful diet and cooling drinks, with cold to her head and heat to her feet. In the afternoon the nurse observed that when she took a little lemonade she had tremors (such as she called "inward spasms"). In the evening her pulse was 100, later 92, and later 90.

The next day, upon again examining her spine, firm pressure over the cervical vertebræ brought on convulsions of an epileptiform kind; but the same came on after pressure on her bruised shoulder. When I spoke of putting cut cups behind her ears she was quieter, which excited a suspicion of hysteria or malingering. On questioning her she nodded her head affirmatively to every question, no matter what it was. It was necessary to draw her urine off, because she did not pass it herself. In the afternoon three ounces of blood were taken with cut cups from behind her ears. During this her pulse was 96, but by evening it fell to 88.

The next day—the third of her injury—her pulse was 110, and she was irrational if aroused.

The fourth day she was rational when aroused, but sluggish and comatose if not. She was given a drop of croton oil to move her bowels, but it did not do it.

The fifth day her pulse was 96; she was conscious, complaining of pain in her head. I repeated the dose of croton oil, which operated this time.

The sixth day she had a stool and passed her own water for the first time. The pain in her head was less.

From this time she seemed to improve until the thirteenth day, when some women visited her and threatened her with exposure, and she was much depressed. On the morning following, while sitting by her bed about a half-hour after taking some coffee and bread, she called out that she was falling, and was caught by a nurse and put into bed. She was then unconscious, quite cold, with marked dyspnœa and singultus. She was given whisky and carbonate of ammonium by enema, a large mustard poultice was applied to her abdomen, and hot cans to her feet. In a short time there was developed excessive œdema of the lungs. She retched a great deal, and had very much dyspnœa. I held her over the edge of the bed at times, to allow the mucus to flow from her lungs by gravity, which seemed to do her good. Yet it was with some hesitancy this was done, because I was at first inclined to attribute the attack to a sudden hemorrhage or effusion into the fourth ventricle.

Later in the day I made use of the irritating effect of small inhalations of ether to excite coughing and thus expel from her lungs the accumulating mucus. This also proved effective. The treatment was carbonate of ammonium and whisky.

The next day, the fifteenth, she was about

the same, perhaps a trifle better, and could take some liquid food. The sixteenth she was worse, with an amount of œdema which seemed almost certain to destroy her life. At one time her respirations fell to six per minute. Then she was given ammonii carbonatis gr. x and spt. frumenti ℥ss every hour. By night she was better, and the stimulants were given less frequently.

The seventeenth day she was decidedly better, could take some liquid food, and answered, when questioned, that she was better. The whisky and carbonate of ammonium were now given every hour by enema, so as not to annoy her stomach.

Three days later she was able to sit up and talk a little. The œdema had disappeared from her lungs; but the use of carbonate of ammonium was continued for a few days longer, gradually diminishing in amount until none was given. Then she went along with general hygienic treatment until on the thirty-sixth I considered her well.

What was there here to deal with? There was no fracture that could be detected, and, I think, none concealed; but were all these phenomena dependent upon the physical shock sustained by her brain or spinal cord? or did they grow out of the complication of these with her mental and moral anxieties?

In recounting the history of the case I have mentioned the fact that I had a suspicion of hysteria or malingering. This might seem absurd in the face of the terrible fall she had had; and yet, supposing her cerebral injury had not been very great, much of her bearing could have been attributed to one of these, especially when the fact was considered that she was in daily danger of going to jail.

Then, again, what was the cause of the sudden peril which came on her the fourteenth day? It did not follow immediately upon the threat of exposure, but nearly twenty-four hours after. And how could one account for the rapid establishment of extreme œdema of the lungs? This was so rapid and so extensive as to lead me almost to despair of her recovery; and yet she pulled through it.

Recovery would have been, I think, incompatible with the existence of a hemorrhage into the fourth ventricle. Could it have been an effusion?

These and a number of other questions were called forth by the case, and they have remained questions to me from that time to this.

4041 Locust Street, Philadelphia.

MAGNETISM AS A DESTRUCTIVE FORCE.

BY JOHN VANSANT, M.D.

THE following communication was deemed by Dr. Ruschenberger to be of sufficient interest for publication in the *Times*.

New Orleans, La., December 14, 1876.

My dear Sir,—Confident that you feel a deep interest in all things tending to the advancement of science, and that you will immediately appreciate the importance of a new fact relating to the correlation of certain forces not now acknowledged by the learned world generally as having reciprocal action, I take the liberty of enclosing to you, herewith, *a spider killed by magnetism.*

This small animal had its vitality destroyed by the magnetism emanating from a small steel magnet of the U shape commonly sold in the shops. The legs of the magnet were only about two and a half inches long, by one-half inch wide and one-sixth inch thick, and the distance between the poles about one-quarter of an inch. Not the slightest mechanical injury was inflicted upon the spider; in fact, it was not touched by the magnet except as its own motions brought it in gentle contact with the steel. My procedure was simply and exactly this. Sitting on a chair, in my chamber, on Sunday last (December 10, 1876), I noticed the small spider, whose dead body I send you, actively running along the arm of my chair. Watching my opportunity, I carefully brushed it with my finger down upon the carpet of the floor, when it began to run off, but was impeded somewhat by the roughness of the carpet. I at once took from a drawer the small magnet above described, and, having removed the armature, I slid the instrument along the carpet, following after the spider, till I got the latter between the magnetic poles.

Almost instantly the spider stopped, and in a few seconds it seemed motionless; but in two or three minutes it began slowly moving its legs and elevating and depressing its head, thus touching and separating itself from one or other of the poles, though not going from between them. During this time I sat near the magnet, but did not touch it. In about five minutes the spider lay quite still, and in about ten minutes I covered both magnet and spider with a large glass tumbler, and left them thus for about two hours. I then removed the glass; and, on examination with a magnifying lens, the spider, which had not moved, was apparently *dead*. Lest it might revive by shaking, it was not touched during this examination, and the animal and magnet were left in position for some twelve hours longer. The spider, as I send it to you, has contracted and greatly diminished in size, not being above a third as large as it was when living.

I have killed spiders and other small animals, as worms and insects, as well as some plants, by magnetism, at different times during the last eight years, but I never before succeeded in thus destroying the life of a spider so quickly, and without touching it frequently, though lightly, with the magnet I used. I think this spider was not in very vigorous health, as its color was rather pale. This fact, however, can detract nothing from the value and importance of the experiment, which demonstrates that *magnetism affects the functions of living beings.*

I have at different times, and operating on various kinds of insects, proved the same fact, without allowing the insects to come in contact at all with the source of magnetism. This can be done by enclosing the insects in very thin glass tubes, and operating through the glass either with permanent or electro-magnets, or with helices of insulated copper wire conveying electric currents. I have thus plainly affected the functions of insects, though only in a few instances has the molecular perturbation been sufficient to destroy life; and in those few instances the animals were very small, and brought into very close proximity to the poles of the magnet.

The thousands of careful experiments upon the higher animals, including man, which I have made, prove, beyond reasonable doubt, not only that magnetism can disturb the vital equilibrium of animals, but also that *animals have a polar organization*, certain living organs and parts of organs being influenced in a definite manner by a given magnetic pole, and in an entirely different manner by the opposite magnetic pole, and certain other organs, when acted upon by the first-named pole, exhibiting effects analogous to those produced by the action of the opposite pole on the first-mentioned organs. The effects referred to are mostly general symptoms produced throughout the organism, and can be arranged into two opposite groups.

The most comprehensive classification of the polar organization of animals corresponds with the anatomical construction of the nervous system, and, in man, divides the body into two lateral halves, all parts to the *right* of a median plane extending from the top of the head to the bottom of the scrotum being *negative*, and all parts to the *left* of such plane being *positive.*

But if the magnetic application be made *only exactly in the median line*, either anteriorly or posteriorly, and at different parts of this line, the general symptoms that follow in the system, when sufficient time has been allowed between the several applications, will indicate that there are also transverse polar divisions of the body.

Tested thus, it can be shown that the *head* is *positive*, corresponding with the polarity of the left hand; the *neck* is *negative;* the *thorax* is *positive;* the *abdomen* is *negative;* the *penis* is *positive;* the *scrotum* is *negative.* Still, the *right mammilla*, male or female, is strongly *negative*, whilst the *left one* is equally *positive.* The *right hand* and *foot* are *negative*, and the *left ones* are *positive;* the *right side of the face* is *negative*, and the *left side of it* is *positive;* the *right testis* is *negative*, and the *left one* is *positive.* The *tip of the tongue* is *positive.* The *umbilicus* is *negative.* The *anus* is *negative.* The *ostium vaginæ* is *negative.*

Those organs or parts are called *positive* which, if applied to one another for a considerable time, will produce in the system of a sensitive person general symptoms analogous to those which would be produced by the application of the *southward* pole of a steel magnet (boreal magnetism) to *either* organ, or by the application of *polished glass* excited by silk to the same organs, or either of them.

Those organs are called *negative* which, when acted upon by the *northward* pole of a steel magnet (austral magnetism), or by *sealing-wax* excited by woollen cloth, produce general symptoms in the organism *similar* to those produced by the southward pole of a magnet or excited polished glass applied to positive organs, and the *reverse* of those produced by the northward pole of a magnet or excited sealing-wax applied to positive organs.

These general symptoms I have arranged and tabulated into two groups, called *sthenic* and *asthenic;* the former arising from the reaction of boreal (+) magnetism on positive (+) organs, and the latter from the reaction of the same (+) magnetism on negative (—) organs; or, by employing austral (—) magnetism, the sthenic group will arise from the reaction of this kind of magnetism (—) on negative (—) organs, and the asthenic group from its (—) reaction on positive (+) organs.

I have also proved, experimentally, that *heat* (+) and *cold* (—), the *solar rays* (+), the *poles of a galvanic battery* (+ or —), *induction sparks* (+ or —), the *radiation surrounding a wire conveying an electric current* (+ or —), and the *affinity force* (+ or —) of various elementary and compound bodies can be used to demonstrate the polar organization of the human body as above described, and confirm the results first obtained by magnetism.

In regard to the exact polar condition of the two halves of the cerebral hemisphere, it would appear that if the mental symptoms, as, for instance, depression, irritability, and incapability of concentrating the thoughts, produced by the application of austral (—) magnetism to some distant positive (+) organ of the body, be caused by a molecular movement propagated along the nerve-fibres of animal life to the brain, then, on account of the decussation of these fibres near the base of the cerebrum, the *right* half of this viscus must be *positive*, and the *left* half *negative; i.e.*, the reverse of the polarity indicated by the corresponding side of the body and external parts of the head.

This question, however, because of the uncertainty that at present exists as to the *modus operandi* of the magnetic force on the living tissues,—whether it affects the organism primarily through the nervous system of animal life, or through that of organic life, or whether both systems are simultaneously responsive,—cannot be satisfactorily answered. I at first thought that the impression was primarily conveyed by the sympathetic nervous system; and the want of sensation in most instances in the part submitted to magnetic action, the slowness of the supervening general symptoms to manifest themselves, and their persistency afterwards, and the character of many of these symptoms, as congestion and pallor, visibly indicating a profound influence exerted on the capillary circulation, afford strong reasons for this view. Further investigation will be necessary to determine this point.

For an account of some of my earliest researches into the matters spoken of in this letter, and for a tabular view of the two groups of general symptoms produced by magnetism of either kind applied to particular parts of the human body, I would refer to an article in the *Journal of Psychological Medicine* for April, 1870 (published by D. Appleton & Co., New York), entitled "*The Physiological Action of Magnetism.*" That table, though incomplete and in a few instances incorrect, is in the main a true statement, and, in connection with what I have herein made known, may be used as a guide for the therapeutical application of magnetism and its correlative natural forces.

I am, respectfully, and very truly, yours,

JNO. VANSANT, M.D.

To DR. W. S. W. RUSCHENBERGER, U.S.N.

NOTE ON PROTAGON.

BY C. G. POLK, M.D.

IN order to answer numerous inquiries as to the nature, uses, doses, and diseases in which it is indicated, I will state that protagon may be obtained by Liebreich's method, or by the more complicated one which I pursue, from animal brain. At present I am preparing it from the brain of the cow. It consists of the phosphoid constituents of the brain. Of these kephaline is by far the most valuable, being exceedingly rich in phosphide of nitrogen and cerebric acid. Lecithene, myelene, and neurine are very inferior as remedial agents. Each pound of the liquid protagon contains the phosphoid constituents of thirty pounds of brains, or the amount that can be held in complete solution. It is permanent, and does not deteriorate by age. It has a pleasant slightly acid taste, no odor, or nearly none, and is as clear as an extra specimen of glycerine. I recently have ceased the use of cod-liver oil, and rely upon protagon or the glycerate of kephaline with Loeflund's extract of malt. I have found this treatment to be admirably successful in pulmonary consumption, general debility, anæmia, constitutional deterioration, and I am very confident the result has been better than if I had used the oil. My experiments with these agents, although extending over a period of eighteen years, have been vitiated as to their results by being given in association with *cod-liver oil* and other agents of unquestioned value until within the last six months.

The dose of protagon is ten drops in water, glycerate of kephaline six drops, each dose representing one grain of anhydrous cerebric acid. The dose may be repeated three or four times a day. It almost never disagrees with the stomach, and if associated with Loeflund's malt extract may be given after all other medicines are rejected. Recently, in an almost hopeless case of diphtheria, in which the powers of digestion became completely in abeyance, I gave the malt extract and glycerate of kephaline, rapidly restoring the appetite and securing a nice recovery. I may here state that the glycerate of kephaline is a saturated solution of cerebric acid, cerebrate of nitrogen, and cerebrate of sodium in chemically pure glycerine. The two hundred and eighty grains of phosphide of nitrogen contained in the kephaline, out of which one pint of the glycerate is made, may or may not exist in the solution in its normal formula.

The regular medical profession, to the decision of which I am ever ready to submit, will, however, decide the therapeutical value of protagon and kephaline, as also the claim of priority of use as remedial agents, now made by myself and Prof. Samuel R. Percy of the New York Medical College.

2349 CATHERINE STREET.

M. ALFRED DESHAIES, aged 36, chemical préparateur to the Collége de France, was recently found dead in the laboratory, and is believed to have been killed by some new chemical compounds whose effects upon himself he was trying.

NOTES OF HOSPITAL PRACTICE.

BELLEVUE HOSPITAL, NEW YORK.

CLINIC OF PROF. AUSTIN FLINT, SR.

Reported by P. Brynberg Porter, M.D.

FATTY DEGENERATION OF THE HEART.

THE first patient whom I present to you to-day, gentlemen, is a woman between 60 and 70 years of age. From the general symptoms, as well as what cardiac physical signs are present, I should say that she was probably suffering from fatty degeneration of the heart, though I do not regard the diagnosis as certain. With this condition the general symptoms are such as are referable to diminished power on the part of the heart to carry on the circulation properly; and in the present instance we find that the pulse is considerably slower than normal, and somewhat irregular, and that dyspnœa is easily excited by a small amount of exercise. On examining the chest the impulse is found to be very feeble; and the same is true of the heart-sounds, particularly the first sound. The above signs, taken in connection with the age of the patient, and also with the *arcus senilis*, which is here present, warrant us, I think, in giving the opinion that the diagnosis above mentioned is at all events highly probable.

The treatment in this case will consist in merely keeping the general health in the best condition possible, and in the administration of digitalis as occasion requires. And here I wish to impress upon you that a certain amount of discrimination is necessary in the exhibition of digitalis; for it may do harm if given too freely or in cases where it is not indicated, by augmenting the heart's action beyond the normal. The two great indications for digitalis are (1) weakness and (2) irregularity of the heart's action.

ENDOCARDITIS.

Before introducing the next patient I wish to make a few general remarks on the inflammatory affections of the heart. Carditis is a subject of little importance, and need not detain us; but endocarditis is deserving of the closest attention on account of the very serious results which are so apt to follow it. It is a remarkable fact that this affection was utterly unknown until very recent times, and that its discoverer, the distinguished Bouillaud, is still living. Perhaps, however, it is not so strange, after all, that it escaped notice so long, since we never get acute symptoms with it except when it occurs in the rare form of ulcerative endocarditis. We are perfectly familiar with it now, in connection with rheumatism and Bright's disease, and yet even in acute rheumatism, when it sets in, there is no appreciable difference in the symptoms. We have to depend entirely on physical examination for its detection, and this art, as you are aware, has not been known long. The patient whom I now bring before you entered the hospital while suffering from acute tubal nephritis, but had no heart-trouble whatever. Afterwards it was noticed that he had, and the murmur heard was a mitral systolic one, loud, rough, and for the most part confined to the præcordium. It was never regurgitant (not being transmitted beyond the apex). Now we have a basis for diagnosis.

The history of the case is as follows. James G., 40 years of age, and a native of England, was admitted to the hospital about a fortnight ago. He is a gardener by occupation, and his family history is good. He acknowledges that he is a hard drinker (taking more or less liquor before breakfast), but denies that he has ever had venereal disease. His health was good up to the commencement of his present attack. Three weeks before that time he caught cold, and drank an unusual quantity of spirits. Somewhat later he noticed some œdema of the feet, and this extended until his whole body became water-logged. At the same time he suffered from headache, nausea, and vomiting; but he nevertheless continued working as well as drinking. The night before his admission he had a violent attack of delirium, three men being required to hold him in bed. He says that for six months past he has been passing a larger quantity of urine than normal, and that there has been no change in this respect of late. On admission, it was found that he was suffering from general œdema, but the chest-sounds were normal. The urine was markedly albuminous, and contained both large and small hyaline casts. Under the influence of active catharsis, and cupping over the region of the kidneys, the œdema rapidly disappeared. There was at once a marked improvement in his condition, and the delirium from which he was suffering when admitted

gradually subsided. He was afterwards put on digitalis.

One week ago he complained of some pain in the chest, and on examination there was discovered a soft blowing murmur at both the apex and base of the heart. It was loud and rough, extending over the entire cardiac area. We have here the evidence of an acute endocarditis. In listening to the murmur you will notice the difference in the sound over the apex and over the body. This has no special significance, and is simply due to the different conditions in the different parts. The patient is doing well; but it is still a question in his case whether the acute affection did not supervene upon a chronic one. If the albumen does not soon disappear, we shall conclude either this, or that the present is one of those rare cases in which chronic Bright's disease succeeds to acute nephritis.

PERICARDITIS.

While speaking upon these inflammatory cardiac affections, I should like to have an acute case of pericarditis to show you, but, unfortunately, there are none in the house just now. Under these circumstances I shall have to do the best I can; and the patient whom I now present to you is one who had an attack of this affection a month ago. His history is as follows. William B., a native of Germany, 25 years of age, and a seaman by occupation. He was healthy up to three years ago, when he had a severe attack of rheumatism, lasting about a month. He had no pain over the præcordial region at that time. (Pericarditis, as you are aware, is more frequently associated with rheumatism than with any other disease, but it is also met with in Bright's disease, as well as in pleurisy and pneumonia.) His present illness commenced one week before he was admitted to the hospital. This was another attack of acute articular rheumatism, and it first affected the ankles, then the knees, and afterwards the hands and fingers. Just before admission he noticed a pain over the præcordial region. It was at first dull, but afterwards very acute, and accompanied by dyspnœa.

It is noted in the history prepared by the house-physician that the pain and swelling in the limbs were greatly relieved by the ride from his residence to the hospital in the ambulance, so that he was able to walk about the ward on his arrival here. This serves to show the benefit of what I may call methodic friction. When a joint is affected with acute rheumatism, great relief can be given by rubbing it with some lubricating liniment, at first with the lightest possible touch, and afterwards increasing the pressure applied until a very considerable amount of force can be used, to the great comfort of the patient. The ride in the ambulance, no doubt, had some such effect as this. At present the patient suffers from no dyspnœa, and the pain has almost entirely disappeared. On auscultation a loud, harsh friction-sound was heard all over the præcordial region, and also a soft blowing murmur at the apex, but not transmitted beyond. It may be laid down as a law that when we have rheumatic pericarditis there is also endocarditis present. The treatment consisted at first of twenty grains of salicylic acid every three hours, together with counter-irritation over the heart. Afterwards the iodide of potassium was given. After the patient had been in the house a few days the presence of fluid in the pericardial sac was detected, as well as in both pleural cavities. One week ago the note in the history is that the murmur still continues, but that the fluid is gradually diminishing, while the patient's condition is greatly improved. Personally, I have not examined the patient as yet, and before doing so let me run over the physical signs of pericarditis. The friction-murmur which is one of these characteristic signs is always limited to the præcordium, or extends but very slightly beyond it. We are not told in the history that there was a large effusion in the pericardium in this case. Let us suppose that there was. We should then have found a total absence of heart-impulse. On auscultation, the heart-sounds would have seemed all muffled and distant, and both the first and second sounds would have been very much alike. In such cases the first sound is always notably weak and valvular in character. Another indication of the affection is the area of dulness extending just over the area of the pericardial sac, which is visible to the eye and appreciable to the touch, in the form of a pyriform tumor. These signs afford the proof of pericarditis and pericardial effusion. At the present time the symptoms have entirely disappeared in this case. In addition, there is very little fluid in the pleuræ now, and the patient is prac-

tically well. It is remarkable that I do not get any endocardial murmur whatever to-day; and I therefore conclude that this is one of those cases (an exception to the general rule) in which the murmur entirely disappears. This is due to the fact that the products of the inflammatory action lately present have all been washed away; and our patient is certainly to be congratulated upon such a desirable result.

JAUNDICE OF TWO YEARS' STANDING.

In this patient you see at once the yellow discoloration of the skin, as well as of the conjunctiva. You notice, also, the darkness of the color, which, though not deep enough to constitute what is known as "black jaundice," is sufficient to show that the affection has already lasted for some time. Icterus is merely a symptom; but it always indicates obstruction. The most common cause of it is a duodenitis, and among the others may be mentioned the pressure of various tumors on the biliary ducts. The patient's name is James P.; he is 51 years of age, and he was admitted three days ago. As far as I can make out, there is no history of acute duodenitis or of hepatic colic; nor is there any evidence of the presence of a tumor. You may ask me, may this not be an affection of the liver itself? In this class of disease, however, there is, as a rule, no jaundice whatever. The rare affection known as acute yellow atrophy of the liver is an exception, but that is attended by numerous grave symptoms which are entirely lacking in the present case. The most probable condition here is a chronic inflammation of the duodenal mucous membrane; and I arrive at this conclusion by a process of exclusion, there being no history of gall-stones or of any sort of a tumor. The patient tells us that his jaundice has continued now for two years; yet his digestion and his general health are good, though the stools are rather pale in color. The obstruction, then, is evidently not complete, and, as there is no reason to believe that it has increased any of late, he will probably remain in his present condition for an indefinite period. In the mean time I should not advise to pursue any active course of therapeutics, but, as long as he continues well and comfortable, simply adopt an expectant plan of treatment.

CIRRHOSIS OF THE LIVER.

Patrick C., aged 49, a native of Ireland, and a laborer. We find here a globular enlargement of the abdomen, with a sense of fluctuation. Hydroperitoneum, without any other dropsy, always points not only to an affection of the liver, but to one particular affection of that organ. We have no history of this case, but its etiology is all-sufficiently explained in one word,—"drink." Now let us put two or three questions to the patient. What have you been accustomed to drinking? "Spirits." Before breakfast? "Yes." How many glasses in the morning? "One, two, three, and sometimes four, according to circumstances." Then do you drink before dinner again? "No." Do you drink much water with your liquor? "Very little, and often none at all." Now, gentlemen, we have here a typical illustration of the connection that exists between the use of spirits thus taken and cirrhosis of the liver. If an individual wishes to indulge in ardent spirits and at the same time avoid cirrhosis, let him be careful not to take it either on an empty stomach or with but little or no water. The constant irritation from such drinking as our friend here has been accustomed to results, after a time, in a new formation (of fibrous tissue) which is probably of an inflammatory nature. Another effect that follows is impairment of the general nutrition, giving rise to emaciation, cachexia, etc.

In the way of treatment, the indication is to perform the operation of tapping just as soon as the quantity of effused fluid causes inconvenience to the patient. I would furthermore advise the repetition of the tapping as often as the abdomen increases again to an inconvenient size; since it can be done with impunity whenever there is a necessity for it. The time may come when the peritoneum will not fill up again; and I have myself observed this in occasional instances. I regard the treatment of cirrhosis by repeated tappings as much preferable to the active course of cathartics, diuretics, etc., which it is otherwise necessary to resort to.

TRAUMATIC TETANUS.—Dr. G. A. Evans reports (*Trans. Med. Soc. County of Kings*, September, 1877) a case in which nitrite of amyl seemed to do harm, but in which recovery followed the bold administration of cannabis indica.

TRANSLATIONS.

TREATMENT OF THRUSH (APHTHÆ).—Dr. E. Ory (*La France Méd.*, 1877, p. 419) has collected the following formulæ. It must be remembered in treating aphthæ that certain affections of the digestive organs—troubles of nutrition, inflammation of the buccal mucous membrane, with augmented acidity of secretion—are conditions favoring the development of the fungus which constitutes the affection. The physician, therefore, must address himself as much to the general condition as the local affection. According to Blache, when the general condition is good it suffices to touch the mucous membrane a number of times daily with the finger, or, better, a pledget of lint on forceps, covered with the following:

℞ Glycerin. (pure), ℥i;
Aluminis, ℈iv.—M.

The mouth should be frequently washed out with Vichy water, either pure or diluted with one-fourth part of milk, or, better still, with decoction of krameria.

Trousseau recommends the following gargles:

℞ Sodii borat.,
Mellis rosæ, āā ℥ss.—M.

Or, better:

℞ Potassii chlorat., ℈iv;
Mellis rosæ, ℥ss.—M.

The honey may sometimes be replaced advantageously with syrup of krameria. In rebellious cases, Trousseau practised cauterizations with nitrate of silver:

℞ Argenti nitrat., gr. xvi;
Aquæ destillat., f℥ss.—M.

This solution, however, is apt to discolor the teeth, and therefore may be advantageously replaced by solutions of the sulphates of zinc or copper.

Bretonneau used to use powdered calomel, mingled with mucilage, as a topical application. Sée rubs the affected spots with a bit of rag, and then bathes them with this mixture:

℞ Glycerinæ, f℥x;
Amyli,
Sodii borat., āā gr. viii.—M.

West indicates an analogous formula: he does not use preparations containing honey, on account of their liability to ferment:

℞ Sodii borat., gr. xxx;
Glycerinæ, f℥i;
Aquæ, ad f℥i.—M.

He applies this very carefully on a clean linen rag, after having had the mouth thoroughly washed out with warm water. In the rebellious forms, he cauterizes with nitrate of silver solution, of the strength of about one grain to the ounce.

Parrot uses the following:

℞ Glycerinæ,
Mellis rosæ, āā ℥ss;
Potassii chlorat., ℥iss.—M.

Müller suggests:

℞ Acid. salicylic., gr. xvi;
Glycerinæ, ℥vi;
Aquæ, ad f℥ii.—M. x.

PHYSIOLOGY OF THE VASO-MOTOR NERVES.—*Le Mouvement Médical* for July 7 gives an analysis of a recent work by M. Paul Bricon upon this subject. The following conclusions are formulated by the author. They only concern the vaso-motor nerves contained in the rachidian nerves, although there is no reason to believe that the physiological action of these differs in any way from that of other nerves of the same sort. Conclusions: 1. The immediate result of the section of a nerve containing vaso-motor fibres is an active, not a passive, effect. 2. Irritation (by chemical, mechanical, or electrical agents) of the peripheral end of a nerve containing vaso-motor fibres produces dilatation of the vessels of the corresponding member. 3. Irritation by means of an induced current of the peripheral end of a nerve containing vaso-motor fibres may cause constriction of the vessels of the corresponding members. (The author differs here from Goltz, who thinks that irritation always causes dilatation, sometimes, it is true, preceded by a very brief constriction.) 4. The different results obtained by irritation by induced currents are due to the intensity of the current,—a feeble current causing dilatation, a strong one constriction, of the vessels. (Legros and Onimus, in opposition to the author, deny that induced currents can produce aught else than constriction.) 5. There is only one species of vaso-motor nerves, comprising centrifugal and centripetal fibres. These may give rise—1, under the influence of violent excitation, to spasmodic contraction of the vessels; 2, if the excitation is less violent, to peristaltic and independent movements of the vessels. x.

ANTHRAX ABDOMINALIS.—E. Masing (*Petersb. Med. Wochens.*, 1877, Nos. 9 and 10; abstract in *Centralbl. f. Med.*,

1877, p. 398) communicates several cases of this affection. The first three, which occurred in the St. Mary Magdalen Hospital, showed the pathological appearances of anthrax as observed by Bollinger in horses. Large nodules were scattered over the whole intestinal tract, particularly in the mesenteric glands; the spleen was not remarkably enlarged, but extremely soft; the blood was swarming with "rod bacteria and micrococci."

The fourth case, which, like the first three, occurred in a worker in horse-hair, recovered after experiencing the same symptoms as the other patients (one pustule on the jaw was already markedly eroded before his entrance to the hospital), but no baccillæ were found in his blood. In spite of this, Masing is inclined to assert a genuine recovery from anthrax in this case, on the ground of the generally characteristic clinical symptoms,—sudden attack with chill and feverishness, headache and great weakness, rapid decline of the fever, with clear intellect. In all the cases there was pain in the abdomen, spontaneous and upon pressure, meteorism, and ascites. In opposition to Bollinger, who asserts vomiting to be a constant symptom, Masing only observed one of his patients in the hospital vomit once; another was said to have vomited once before coming under observation. x.

Molluscum Contagiosum.—M. Vidal (*Le Progrès Méd.*, 1877, p. 450) communicates to the Société de Biologie the result of his researches made in connection with M. André on the pathological anatomy of molluscum contagiosum, or *acne varioliforme.*

This is an affection of the sebaceous glands, from the centre of which it originates. The entire gland is hypertrophied; the most characteristic lesion is a colloid degeneration of the cells. This affection should not be attributed to parasites; for only the demodex (and it rarely) is found. M. Vidal has attempted repeatedly to inoculate the affection, but has failed. M. Renaut regards the disease as a horny degeneration. x.

Splenotomy.—Billroth (*Wiener Med. Wochenschr.*, 1877, No. 5; abstract in *Centralblatt f. Med.*, 1877, p. 383) had under his care a woman 25 years of age, in whom in the course of two years the spleen had become enormously large and hard, with simultaneous development of leukæmia (one white to five red blood-corpuscles). The liver was also enlarged; there was no ascites. An incision was made beginning a handbreadth above the umbilicus and extending to the same distance below; the spleen was drawn out through this opening, and the gastro-lineal ligament doubly ligatured in several places with hempen thread, and cut. Two drainage-tubes were introduced, and the abdominal wound then sewn up. A few hours later, so much pressure was exercised during defecation upon the abdominal walls that a severe hemorrhage took place, to which the patient succumbed. Billroth thinks it would be desirable in a subsequent case, in order to avoid hemorrhage, to stitch a bit of the pancreas in with the ligature, as otherwise the ligature would be apt to tear out of the short peduncle. x.

Treatment of Syphilis by Means of Subcutaneous Injections of Calomel.—Forty-six cases of syphilis occurring in Rinecker's clinic were treated by calomel injections. Kölliker (*Centralbl. f. Chir.*, 1877, No. 7) praises this treatment as easily and conveniently carried out, and as particularly calculated for walking patients. The dose injected was .05 centig. in adults, .025 millig. to .03 centig. in children, suspended in ten times the amount of glycerine and thrown under the skin of the back and the lateral abdominal region. Ordinarily six injections were sufficient, made at intervals of four to six days. Many abscesses were produced, which, however, always healed kindly. Stomatitis was rarely observed. The influence of this method of treatment is particularly favorable in the inital sclerosis and the earlier exanthemata; favorable results are, however, attained in the gummatous forms. Pregnancy is no contra-indication. The pain caused by the injection is trifling when compared with that to which corrosive sublimate gives rise. This form of treatment is peculiarly indicated in cases where patients are liable to stomatitis and mercurial eruptions, or where there are numerous sores preventing inunction; also when the digestion is feeble, so that mercury cannot be given by the mouth. x.

Mr. Simon (*Chicago Medical Journal and Examiner*) states that he instantaneously cured a case of hiccough which had lasted twenty-six hours by the inhalation of three drops of nitrite of amyl.

PHILADELPHIA
MEDICAL TIMES.

PHILADELPHIA, SEPTEMBER 29, 1877.

EDITORIAL.

FIRST FRUITS.

VERY early in the discussion of medical education we called attention to the absolute poverty of our foremost medical colleges, showing the cause to be their organization as marts for the sale of the right to practise rather than as institutions of learning, and expressing the belief that so soon as they were placed upon a proper basis endowments would be forthcoming. The Medical Department of the University of Pennsylvania, in its recent history, exemplifies the truth of these assertions. One of its professors, some years since, bestowed upon the University a large gift for the purpose of establishing a post-graduate course in sciences allied to medicine; but the medical department proper, in the hundred years of its existence under the old organization, had received no endowment and had accumulated no property beyond the building it occupied and the collections left to it by successive professors.

The new régime, not yet fairly inaugurated, already begins to bear rich fruit. Over sixty thousand dollars were, at the inception of the movement, subscribed as a guarantee fund to maintain the school during the transition-period. There are, however, to-day more matriculants than at the corresponding period last year: so that, whilst it is too early to draw positive conclusions, it seems probable that there will be no such falling-off of income as was expected. Recently, almost all of the subscribers to the guarantee fund have expressed their willingness to carry over to the endowment such portions of their subscriptions as should not be called in for current expenses, so that a large amount may possibly accrue to the permanent fund.

A separate gift of fifty thousand dollars for the endowment of the Rhea Barton Professorship of Surgery is also announced. Mrs. Dr. Barton, the donor, is the daughter of the late John Jacob Ridgway, who left a very large fortune to be divided between his two daughters. By the will of Dr. Rush, the husband of one of these ladies, one share of the estate founded the Ridgway Library, or the Ridgway Branch of the Philadelphia Library, and finds an expression on South Broad Street in an exceedingly beautiful and substantial granite building.

Dr. Rhea Barton, in whose honor the chair of Surgery has been endowed, died in 1871. He was the son of William Barton the brother of Dr. Benjamin Smith Barton, who held at successive periods of his life the chairs of Natural History and Botany, Materia Medica and Pharmacy, and Theory and Practice of Medicine, in the University. Dr. Rhea Barton himself was one of the most brilliant surgeons this city has ever produced: as an operator he is stated to have been ambidexter and wonderfully skilful.

His long connection—as "apprentice" and later as surgeon—with the Pennsylvania Hospital afforded an abundant field for his talents, and for many years his skill commanded the first place upon a brilliant surgical staff. He is perhaps most widely known by the fracture of the wrist called after him, and by the very useful bandage which he devised for the treatment of fractures of the lower jaw. But more important contributions to surgery than these were his bran dressing for compound fractures; section of the femur for bony anchylosis of the hip; and the cutting out of a wedge-shaped piece of bone for a similar condition of the knee. Dr. Barton's hip-operation has been variously modified by I. K. Rodgers, Post, and Sayre, of New York, but

lives in the recent practice introduced by Adams, of London, who performs it subcutaneously.

It is to commemorate the life and talents of this great surgeon that his widow has endowed the Surgical Chair in the oldest American medical school. And, whilst we congratulate the trustees of the University, the friends of higher medical education, and the future communities whose sick-rooms shall to all time feel the impulse of the gift, we do also congratulate Mrs. Barton on the wisdom of her choice. No monument could have been found more fitting for such a man, as no man more fitting for such a monument.

THE MEDICAL SERVICE AT THE CENTENNIAL.

WE cull from advanced sheets of the report of the Medical Director of the Centennial Exhibition a few facts of general interest.

There was an enormous percentage of very serious sickness among the Japanese exhibitors, due partly to the violent change in their mode of life and climatic surroundings, and largely to their mode of living. Their dwelling was so slightly built as to afford very little protection against either heat or cold; and in cold weather the occupants were crowded into rooms almost hermetically sealed, with no outlet whatever for the emanations from the body or for the fumes of the charcoal braziers which furnished the only means of heating. No wonder eighteen per cent. of them suffered from typhoid fever.

At the Centennial Hospital were treated 6463 cases of disease and injury. Although there were acres of moving machinery, and the steam railway carried around the grounds 3,784,142 passengers, there was no serious accident. There were only four deaths upon the grounds, no births, and but one abortion. These facts furnish strong proof of the admirable management of the Centennial authorities, of the modesty which keeps the American female secluded during the later months of pregnancy, and of her retentiveness during the earlier days of her sorrow.

Dr. Pepper, we think, makes out a very clear case that there were no foci of fever-poison on the grounds, and that the water-supply and drainage were very carefully attended to and were good.

CORRESPONDENCE.

NEW YORK, September 1, 1877.

TO THE EDITOR OF THE PHILA. MEDICAL TIMES:

DEAR SIR:—The most important matter of interest that there is to report in medical circles at present is the work of the extra corps of physicians appointed by the Board of Health to look after the children of the poor, and the effect of their ministrations upon the mortality of the city. The death-rate during July was given in my last letter, and it was then shown that after this work had been commenced it at once began to diminish. This decrease continued steadily as long as the corps were on duty, as is shown by the following figures:

Deaths in New York during week ending August 4, 650; during week ending August 11, 625; during week ending August 18, 553.

The number of deaths of children under five years of age reported during the week ending August 11 showed a decrease of no less than 100 from the week preceding; and the number reported during the week ending August 18 was still smaller than that. This diminished death-rate occurred notwithstanding the fact that the weather was considerably hotter after the work among the children was commenced than it had been before. During the week ending August 18, the physicians were discharged, and in the week following the number of deaths in the city began to increase again, running up to 596 (an increase of 43 over that of the preceding week). During the week ending September 1, the mortality has furthermore increased to 644.

The following is an extract from the report of Dr. E. H. Janes, Assistant Sanitary Superintendent, on the labors performed by the corps of special physicians:

"The services of these gentlemen—forty-seven in number—consisted in visiting from house to house the poor of the city, particularly those residing in crowded tenements, with a view to the relief of children suffering from sickness, especially of a diarrhœal character. Each visitor was assigned to a district, which he carefully canvassed, visiting each poor family in succession, imparting in every

instance such advice as appeared necessary, distributing small tracts containing, in the English and German languages, plain directions concerning the cure and prevention of diarrhœal diseases of infancy, and treating such cases of sickness as fell under his observation and were without medical care.

"In the capacity of sanitary missionaries, they visited during the above period (from July 18 to August 14 inclusive), with the aid of five members of the vaccinating corps, 23,566 houses and 131,573 families, treated 4719 cases of disease, and distributed 5128 excursion tickets for the Floating Hospital of St. John's Guild. As these appointments were not all made on the same day, the average number of days occupied in the service was twenty-seven, making an average of about ninety-four visits per day for each visitor." The report then goes on to say, "The greater portion of sickness was, of course, found in the crowded tenements of the most thickly populated wards,—a condition inseparable from this class of dwellings as at present occupied, for wherever there is density of population there is a proportionate amount of sickness, not only from the fact of there being large numbers of people within a given area, but overcrowding almost always implies poverty, want of proper food, neglect of cleanliness, increased amount of refuse, imperfect removal of excreta, and various other conditions, the effect of which is to poison the atmosphere and contribute largely to infant sickness and mortality. So long as it is necessary for the laboring-man to reside with his family near the scene of his daily labors, this condition will continue; and not until there are some means of cheap and rapid transit by which he can remove those dependent upon him away from crowded portions of the city, while he goes to and from his daily work, will the sanitary condition of such neighborhoods be materially and permanently improved."

Dr. Janes gives it as his opinion that this system of house-to-house visitation is attended with many advantages to the poor. "Depending on the various dispensaries for medical relief," he says, "either delicacy or indifference frequently induces them to neglect sending for a physician until disease is too far advanced to admit of further delay; and when at last application is made for medical relief, it may be at a late hour, the dispensary perhaps closed for the day, and another night must pass before the services of a doctor can be obtained, the disease meanwhile making progress, and the chances of recovery lessening in proportion to the delay. On the other hand," he continues, "by visiting from house to house, many cases of sickness are found in their incipiency, and by judicious and timely treatment much suffering is prevented, and, doubtless, many lives saved." This is not only according to common-sense theory, but it appears to be confirmed by our vital statistics during the included period; for during the week ending July 21 there were, among children under five years of age, 285 deaths from diarrhœal diseases, since which time there has been a gradual diminution until the week ending August 18, when the reported mortality among the same class of children and from the same class of diseases was 168. The same results followed a similar effort last year, when it was hinted by some that it might have been a mere coincidence. That a second coincidence should attend a second effort, without any relation of cause to effect, is, to say the least, hardly probable.

The report concludes as follows: "It would hardly be just to close this report without acknowledging the co-operation of St. John's Guild in liberally supplying us with excursion tickets for distribution, and of several druggists who have volunteered to supply medicines either gratuitously or for the mere cost of the drugs. It is the united testimony of the visiting corps, who took pains to revisit the children sent on the excursions of the Floating Hospital, that the results were almost without exception beneficial, and that the Guild is in this way doing a good work towards the relief of infant suffering."

The Board of Health was so much pleased with the results of the labors of the extra corps of physicians that it was with great reluctance that they discharged them; but the appropriation granted for the purpose had been all expended, and there was nothing else to be done. It appears that the great advantage of having such a corps is that incipient cases of diarrhœal disease are thus found out and relieved at a time when most ignorant mothers would never think of seeking medical advice at all, and that much saving of life thereby results. It is no doubt true that if the corps could have been kept on duty during the entire months of July and August the mortality of the city would be even more materially diminished. Still, the death-rate during the present summer has not been high for New York. In a recent report, Dr. Nagle, Deputy Register of Records, says, "The mortality for the past twelve weeks compares very favorably with the deaths in the corresponding period of last year. The total number of deaths reported to this bureau for the weeks ending June 2 to August 18 was 7069 against 8274 for the corresponding weeks of 1876. During these weeks of 1877, diarrhœal diseases caused 2137 deaths, of which 1962 were children under 5 years, against 2602 deaths from the same causes, of which 2455 were children under 5 years, in the corresponding weeks of 1876. 2752 children under 1 year, 3464 under 2 years, and 3974 under 5 years, were reported to have died between May 26 and August, 1877, against 3253 under 1, 4184 under 2, and 4779 under 5, reported to have died from May 27 to

August 19, 1876; or, in other words, there was a gain to human life during the past twelve weeks, compared with the corresponding weeks of 1876, of 1205.

But even when the mortality has been lowest during the past month it has represented an annual death-rate of 29.10 per 1000 persons living. This high death-rate is undoubtedly due in great measure to the tenement-house system, which is such a disgrace to New York, and which shows it in such an unfavorable light in comparison with most other cities. Dr. Nagh states that the annual death-rate per 1000 persons living of the estimated or enumerated population, according to the most recent weekly reports, of Philadelphia was 23.16; Brooklyn, 26.89; St. Louis, 10.67; Chicago, 26.82; Baltimore, 28.27; Boston, 25.55; Cincinnati, 16.76; New Orleans, 20.80; Cleveland, 24.33; Richmond, 28.61; Charleston, 33.98; Savannah, 18.41; Worcester, 32.70; Cambridge, 33.68; Springfield, 11.13. Foreign cities—London, 21.3; Liverpool, 24.5; Birmingham, 17.7; Manchester, 25; Glasgow, 20.2; Edinburgh, 19.3; Dublin, 24.3; Belfast, 22; Cork, 19; Brussels, 20.4; Antwerp, 22.1; Ghent, 29.1; Buda-Pesth, 44.5; Paris, 23.0; Rome, 23.9; Naples, 26.2; Turin, 24.4; Venice, 23.4; Berlin, 49.3; Munich, 35; Vienna, 21.9; Copenhagen, 21.6; Stockholm, 28; Christiania, 16.5; Amsterdam, 23; Rotterdam, 21.7; The Hague, 21; Calcutta, 19.3; Madras, 109.3; Berne, 27.1; St. Petersburg, 31.2.

During the past six weeks whooping-cough has been the most fatal of the contagious diseases, 85 deaths being reported to have occurred from it during this period; scarlatina was second in fatality, with 79 deaths; diphtheria third, with 64 deaths; typhoid fever fourth, with 35 deaths; measles fifth, with 29 deaths; and typhus fever sixth, with 4 deaths. There has not been a single case of smallpox reported in this city for over a month.

A case of so-called *Asiatic cholera* having occurred here, and having been noised about in the papers and then declared by the coroner's jury which investigated it to be nothing more than an ordinary case of cholera morbus, Dr. Edward C. Harwood, who attended the patient, has come out in a card, in which he states that he never used the word "Asiatic," but preferred simply to call the case by its right name,—cholera,—without the addition of a term which itself would require explanation. He adheres to the opinion that the case was one of genuine cholera, and says that he is still more convinced after seeing the results of the post-mortem and consulting the opinions of several eminent authorities on this disease. He refers, among others, to Drs. John C. Peters and J. Lewis Smith, and states that they are of the opinion that the patient died of cholera (and nothing else), such as we witness every year to the number of ten or twelve cases. He concludes as follows: "According to the rules for granting burial permits, there were sanitary reasons why this case should have been promptly reported to the Board of Health; but there were no judicial reasons why there should have been a coroner's investigation. The fact that my friend the deputy coroner—Dr. Cushman—made a post-mortem and certified that the case was one of cholera morbus, did not make it so in the general acceptation of the term as understood by American physicians. This is one of those differences so liable to occur at any time among medical men. This class of cases occupies a position about midway between cholera morbus and Asiatic cholera, and they are very interesting and instructive. They should be carefully studied and reported. Unlike Asiatic cholera, they do not appear to be propagated by fomites; nevertheless, they should be considered as notes of warning by the wayside,—not necessarily causes for public alarm. With proper vigilance on the part of our Board of Health, there can be but little opportunity for an invasion by true Asiatic cholera."

It is doubtless true that a large proportion of the cases reported as *hydrophobia* are spurious; but there seems to be no room for doubting that one which recently occurred here in a child four and a half years of age was genuine in its character. The bite was received about nine weeks before the disease set in, and immediately afterwards the child's mother took him to a druggist, who cauterized and dressed the wounds. They soon healed up, the boy became apparently perfectly well, and nothing more was thought of the matter until Thursday, August 2, when symptoms of hydrophobia became developed. In order to test the case and see whether it really was one of hydrophobia, the attending physician—Dr. Roediger—sat down on the bed where the child lay, and had a basin of water brought and placed behind him, out of the patient's sight. He then disturbed the water with his hand, and when the boy heard the sound he started up in a frightened manner, and no sooner caught sight of the water than he uttered a cry and went off into a prolonged series of convulsions. The sight and taste of whisky produced the same effect as water. Hypodermic injections of chloral and morphia were resorted to at intervals, and, though at first they produced no appreciable result, they afterwards seemed to control the violence of the convulsions to a certain extent. Drs. Janeway, W. De Forest Day, Hammond, Little, Warren, and others, were called in consultation, and they were one and all of the opinion that it was a clear case of hydrophobia. The child died about nine o'clock on the evening of the third day from the commencement of the attack. Dr. Roediger stated that the patient knew nothing of the disease from which he was suffering, and that he thought him far too young to have his

nervous system affected by the imagination, since it takes an amount of reasoning power not possessed by such young children to be thus impressed by fears of the consequences of a bite from a mad dog. He was not sure whether the dog had been mad or not, but was of opinion that the bite of a dog temporarily infuriated was capable of producing hydrophobia under certain circumstances.

A case of considerable interest to our homœopathic brethren is now before the courts. A lady has brought a suit against the proprietor of the "American Homœopathic Pharmacy" on Broadway, to recover $5000 damages, on the ground that the defendant made a mistake in compounding a prescription. The complaint alleges that in May last the plaintiff took to this pharmacy a prescription calling for half an ounce of the second trituration of atropine. The usual custom with druggists and physicians is said to be to use the centesimal scale in prescriptions of this sort when no mention is made of the decimal scale, according to which the strength of the quantity prescribed is greatly increased. Ten grains was the dose required by the prescription. This amount, according to the centesimal scale, would contain $\frac{1}{1000}$ of one grain of pure atropia, but by the decimal scale $\frac{1}{10}$ of a grain of pure atropia. The plaintiff says that she took the dose prescribed and at once became violently sick, and has been greatly injured thereby. She has expended $200 for medical attendance, and her sight is seriously affected. The reply is, that the medicine was in accordance with the prescription, which called for the "second trituration." It is alleged by the druggist that this phrase may be understood to mean not the thousandth, but the tenth, of a grain of the drug. It would seem as if there was some need of reformation in the manner in which active poisons are handled in homœopathic practice.

The voluminous report of the Commissioners of Charities and Correction for the year 1876 was published about a month ago, and from it we learn that the number of patients treated at the various hospitals under their care during the year was 21,584, of whom 16,681 were discharged and 2227 died. The following figures from the larger hospitals will doubtless afford the disciples of Hahnemann abundant grounds for self-congratulation and no little crowing over their extraordinary success; but the explanation of the small rate of mortality at the Homœopathic Hospital is simply that a much larger proportion of chronic cases was treated there than at the other hospitals; and the same fact also explains the larger proportion of deaths at Bellevue than at Charity Hospital.

Hospital.	Cases treated.	Rate of mortality.
Bellevue	5685	12½ per cent.
Charity	8621	8¼ per cent.
Homœopathic	3077	6$\frac{1}{10}$ per cent.

At the Morgue 153 bodies were received during the year, of which 72 were recognized.

A delegation of medical students from one of the colleges is said to have called on Mayor Ely a few days ago to obtain permission to take some dogs from the pound for experiments in vivisection; but the mayor, doubtless with the fear of Mr. Bergh before his eyes, refused to grant their request.

The following remarkable notice, according to the newspaper reporters, was recently seen posted upon the hospital tent at Creedmoor during the target practice of a Brooklyn regiment: "No person allowed to enter this tent except the surgeon and those that are taken ill by permission of the surgeon."

Two prominent New York physicians have died during the past month, one at an advanced age,—Dr. Joseph Worster,—one of the oldest Fellows of the Academy of Medicine, and the other in the flower of his prime,—Dr. A. B. Crosby, the genial and talented Professor of Anatomy in Bellevue College. Dr. Joseph D. Bryant has been appointed to fill the place of the latter temporarily. Dr. Nathan Bozeman, who has been absent so many years in Europe, has recently returned to New York and hung up his shingle next door to Dr. T. G. Thomas, on Fifth Avenue.

P. Brynberg Porter.

PROCEEDINGS OF SOCIETIES.

AMERICAN DERMATOLOGICAL ASSOCIATION.

The first annual meeting of the American Dermatological Association was held at Niagara Falls on September 4, 5, and 6.

The opening address by the President, Dr. Jas. C. White, Professor of Dermatology in Harvard University, comprised a review of the progress of dermatology in the United States. Beginning twenty-five years ago with the advent of a few earnest students of the Vienna School, who worked unrecognized and almost unnoticed by the general profession, the progress of dermatology as a specialty, for a long time delayed, has within the last few years become much more decided, and its prospects for the future are most encouraging. There are at present Professors and Clinical Professors of Dermatology in several of the more prominent medical schools of the country, while almost every school of standing has made provision for special instruction in this branch of medicine. The relations of the dermatologist to the general practitioner were also touched upon in the course of the address, which was a most interesting and valuable contribution to the history of medicine in the United States.

Dr. Bulkley, of New York, read a paper "*On the eczema marginatum of Hebra* (*tinea*

tricophytina cruris), *as observed in America*," giving notes of a number of cases, with treatment. This curious disease, first described by Hebra as an independent affection, is more generally classed as a form of ringworm (tinea circinata or tricophytina). It occurs usually upon the contiguous parts of the scrotum and thigh, and is liable to be confounded with eczema and erythema of the same locality. The treatment recommended by Dr. Bulkley comprised the use of parasiticides, particularly sulphurous acid employed in various degrees of dilution. The disease is sometimes very rebellious to treatment, and is apt to relapse.

The discussion which followed the reading of this paper was taken part in by Drs. Van Harlingen, Heitzmann, Duhring, White, and others; some of Dr. Bulkley's propositions not being coincided in by other members. Dr. Heitzmann did not think sulphurous acid necessary; he had frequently seen the disease cured within six days by the use of Wilkinson's ointment.*

Dr. Duhring said he had found the disease less severe in this country than abroad, and usually found washes, either of dilute sulphurous acid or sulphite of sodium, sufficient to cure the affection. A paper by Dr. Dyce Duckworth, of London, "*On the treatment of severe bed-sores*," was read by the Secretary. Though an interesting and practical paper, this contained no new facts, and the treatment recommended was that ordinarily taught in the medical schools of this country and practised in most hospitals. The paper of Dr. R. W. Taylor, of New York, "*On the xeroderma of Hebra*," was an exhaustive essay upon this exceedingly rare form of disease, and included notes of seven cases which had come under his observation, being more than the total number before recorded.

In addition to the contributions mentioned, the following papers were read before the Association or presented by title. Dr. Arthur Van Harlingen, of Philadelphia, "*The pathology of seborrhœa*." Dr. Robert Campbell, of New York, "*A case of true prurigo*" (of Hebra). Dr. James Nevins Hyde, of Chicago, "*On the immunity of certain mothers of children affected with hereditary syphilis*." Dr. Wm. Hardaway, of St. Louis, "*The lymphatic theory of syphilitic infection, with a new view of the relation between the chancre and chancroid; and suggestions for the radical cure of syphilis*." Dr. Heitzmann, of New York, "*On the relation of impetigo herpetiformis to pemphigus*." Dr. Yandell, of Louisville, "*The etiology of cutaneous diseases*." Dr. Duhring, of Philadelphia, "*Case of an undescribed form of fragilitas crinium*." Dr. Bulkley, of New York, "*Two cases of very late hereditary syphilis*." Dr. Edward Wigglesworth, of Boston, "*Faulty innervation as a factor in skin disease, and auto-inoculation of vegetable parasites, and their non-identity*." Dr. A. R. Robinson, of New York, "*The pathological histology of psoriasis*." Dr. R. W. Taylor, of New York, "*Affections of the testicle in hereditary syphilis*."

The Association adjourned to meet in Saratoga on the last Tuesday in August, 1878. The officers of the Association for the ensuing year are as follows: President, Prof. Jas. C. White, M.D., of Boston; Vice-Presidents, Drs. Carl Heitzmann and L. Duncan Bulkley, of New York; Secretary, Dr. R. W. Taylor, of New York; Treasurer, Dr. Atkinson, of Baltimore.

* Hebra's modification of Wilkinson's ointment:
℞ Sulphuris sublimati,
Olei cadini, āā ʒiij;
Cretæ preparatæ, ʒil;
Saponis viridis,
Adipis, āā ℥j.—M. Ft. ung.

REVIEWS AND BOOK NOTICES.

PRINCIPLES OF THEORETICAL CHEMISTRY. By PROF. IRA REMSEN, M.D. 231 pages. Philadelphia, Henry C. Lea.

We welcome this work of Prof. Remsen as the first of its kind in America, and, indeed, the second, if our memory fails not, in the English language. Prof. Tilden, of Bristol, England, edited a very similar book some time since. The demand for such a work indicates a growing interest in theoretical chemistry, which, it must be confessed, has been sadly neglected in this country. This interest can only come of an earnest desire after a more thorough understanding of the science,—not so much only of it as may conduce to the filling of the pockets.

The first part of the work is devoted to a "General Description of Atoms and Molecules." With the exception of a few introductory remarks and definitions, it is a good and, in accordance with the scope of the work, an exhaustive discussion of the methods of arriving at a correct determination of the atomic weights. In this Prof. Remsen treats progressively of nearly all the general theoretical chemical questions of importance as concisely and carefully as can be expected, at the same time pointing out their important bearing on the question of the true atomic weights.

The second part treats of the "Constitution or Structure of Chemical Compounds." A thorough perusal of this part will, perhaps, bring many chemists of America to a correct understanding of what is intended to be expressed by *structural formulas*. If this be accomplished. Prof. Remsen's book will have done a great and good work. The nucleated or graphic formulas which the author has adopted are, perhaps, the best fitted to convey to the minds of beginners in the theoretical study of this science the known facts in regard to the constitution of chemical com-

pounds. After a thorough mastery of this process of reasoning the inexhaustibleness of the subject will be, perhaps for the first time, fully appreciated by many.

The work, within the limits indicated in the preface, meets the object of the author fully, except in so far as it may have been intended for beginners. For them the style, which resembles somewhat the German, is too involved for a ready comprehension of the logical treatment of the subject-matter. It seems to us that a short summary, sometimes given, as each position in the argument is reached, would aid much in comprehending the bearing of the whole, especially as so much attention is paid to the repetition of definitions.

The second part can scarcely fail to meet the approbation of advanced students; while in the first part the too labored effort at perspicuity would, to many, seem to defeat its object, and really tend to obscurity.

Perhaps our author assumes too much in asserting "that they [the ideas advanced in the work before us] are held by nearly all the working chemists of the day." We would venture to assert that they agree fully only on fundamental principles; while in theoretical chemistry each has his own hypotheses to explain the points at issue, at the same time not denying the apparent validity of others. Considering the uncertainty in which almost every theoretical chemical question is involved, because of the different and yet seemingly well-supported hypotheses adduced, it would be but just to give, if a book is to be written at the present time, the various ideas advanced by the leading chemists. Lothar Mayer, among recent Continental writers who give summaries of the best-supported theories, might, in our opinion, be mentioned as dealing correctly with these much-mooted questions.

We earnestly recommend this work of Prof. Remsen, and hope soon to see a still more extended treatise from the same author on the important subject of modern theories of chemistry. GRIFFITH E. ABBOTT.

HANDBOOK FOR HOSPITAL VISITORS. No. 13, State Charities Aid Association. New York, G. P. Putnam's Sons.

We do not know who is the author of this book, but we do know that the book itself is worthy of the highest praise. As a manual not only for hospital inspectors, but also for all those persons who are connected with the running of such institutions or who desire to know how hospitals should be managed, we commend it most earnestly. Every hospital steward, superintendent, and matron, every hospital doctor or hospital manager in the land, should read it carefully. Its study should be a part of the regular course in every institution where nurses are trained. A small, inexpensive book, there can be no excuse for not purchasing it.

GLEANINGS FROM EXCHANGES.

ANTISEPTIC TREATMENT (*Boston Med. and Surg. Journ.*, August 30, 1877).—Dr. Robert White gives at some length the result of his observation of Lister's antiseptic treatment during a residence of some months in Edinburgh. In regard to its effect in the treatment of abscess he writes as follows:

The treatment of abscesses by the antiseptic method gives very satisfactory results. Mr. Lister and others believe that the suppuration in an abscess before it is opened is maintained by the stimulation of the pyogenic membrane by the pent-up pus, of which a good evidence is the force with which the pus escapes when the abscess is opened, and afterwards by the admission of septic germs into the cavity, causing putrefaction of the remaining pus and stimulation of the pyogenic membrane to increased secretion, which is continued for a long time under the ordinary treatment, by poultices, water-dressings, etc. In large abscesses this constant formation of pus gives rise to serious constitutional symptoms, which are avoided if the abscess be opened antiseptically, and if all the pus be pressed out at the time of incision, none will be found at the next dressing; as a matter of fact, however, a few drops of pus that have remained in the abscess will be found on the next dressings, which will be succeeded by a thin serous discharge that steadily diminishes, the abscess healing fast. It is not only in so-called cold abscesses that this favorable progress is witnessed; it is still more strikingly seen in abscesses connected with bone caries. Late researches tend to establish the theory that caries is the result rather than the cause of suppuration, and that if the accumulated pus be removed, without the supervention of the irritant action set up by putrefaction, the diseased bone is placed under the most favorable conditions possible for repair. The rapidity with which large psoas and spinal abscesses will heal when treated antiseptically could hardly be realized by any one who has not seen such cases.

He thus briefly reviews the advantages of the system in the treatment of wounds:

1. The individual wounds so treated are placed in the most favorable condition possible for rapid healing by the exclusion of the elements of putrefaction, with the consequent irritation and suppuration; and the chances of the infection of the patient with erysipelas, hospital gangrene, pyæmia, and septicæmia from his wound are infinitely lessened.

2. Its influence in preventing the occurrence of the above-named hospital diseases where patients are congregated together, as in a ward, by checking the development of the *contagium* of these diseases in wounds which would surely be putrefactive under other treatment, and the infection by it of other wounds in the vicinity.

It must be borne in mind that the simple application of an antiseptic to the wound does not secure this result. On the contrary, it acts injuriously by delaying the healing, but a treatment is required which will prevent putrefaction without the contact of an irritant agent to the injured tissues; and there is little doubt that those who use Lister's system understandingly, and with a proper attention to necessary but not difficult details, will find that the results will exceed their anticipations.

REMEDY FOR PAIN IN CARCINOMA OF THE CERVIX UTERI (*Boston Med. and Surg. Journ.*, August 23, 1877).—In many cases the following method of treatment has proved very beneficial for the excessive pain in cancer of the uterus, vagina, and rectum. In cases of medullary carcinoma and progressive epithelioma of the uterus, powdered ergot in doses of thirty grains every six hours has proved very beneficial against the terrible pain, for, as a rule, when there is an increase in the amount of blood flowing from the diseased tissue, the pain is much diminished, but in patients who are very much reduced already by the loss of blood, this treatment cannot be carried out.

Another excellent remedy is croton chloral hydrate. This diminishes the pain, not in the cancer, but the reflex pain in the back, thighs, and vulva. As local treatment, it is recommended to place little pieces of cotton-wool, soaked in strong carbolic acid, about the cervix and diseased tissue; this should be done through a speculum; then to syringe out the vagina, morning and evening, with a solution of what is called glycerine carbolic acid, thirty grains in a pint of water.

ABLATION OF THE BODY OF THE UTERUS IN CASES OF IRREDUCIBLE INVERSION BY EXTERNAL HYSTEROTOMY (*The Clinic*, September 1, 1877).—M. Donné (*Archives de Gynécologie*), in a recent communication to the Academy, formulates the following conclusions:

1. External hysterotomy is an extreme surgical resource, but precious for cases of irreducible inversion which threaten immediately the life of the patient.

2. This operation does not furnish a greater mortality than that of the greater number of grave operations.

3. In the actual state of science it ought to be made preferably by the ligature, bearing in mind the perfection attained by this method.

4. For the first months of an inversion,—even the first year, as far as possible,—repeated tentative efforts at reduction, at lactation which generally suppresses the hemorrhages, and all sorts of palliative methods, should be fairly tried.

The operation ought to be reserved for cases recognized as irreducible, and for the period remote from the commencement of the malady, when involution has completely taken place, and the neighboring organs have undergone changes rendering the risk of peritonitis much less, this being very important.

APOMORPHIA AS AN EXPECTORANT (*The Clinic*, September 1, 1877).—Dr. Moritz Wertner records (*Wiener Med. Presse*) his experience with this agent in a large number of cases. He employed it with both adults and children in quite minute ($\frac{1}{16}$ grain) doses, frequently repeated. He considers it a perfectly safe remedy, as he has never observed any ill effects follow its administration.

RESECTION OF THE ŒSOPHAGUS (*The Clinic*, September 1, 1877).—We find the following preliminary report of a new operation by Prof. Czerny, of Heidelberg, in the *Centralblatt für Chirurgie*. An annular carcinoma, rendering the œsophagus impassable, even for a small tube, was removed on May 2 from a woman 51 years of age. The length of the piece removed was six centimetres. The entire thickness of the œsophagus was taken away, and the lower extremity was then fastened in the wound made in the neck. On June 6 the patient was discharged well.

SIGNS BY WHICH PHTHISIS IS RECOGNIZED IN ITS EARLIEST STAGES WITHOUT THE AID OF PHYSICAL EXAMINATION OF THE CHEST (*The Medical Record*, September 1, 1877).

1. Retraction of the skin over the cheeks.

2. Cerulean hue of the sclerotic, due to anæmia of the conjunctiva.

In bronchitis and emphysema there is conjunctiva, and also in the later stages of phthisis.

3. Atrophy of the lips, of the ears, and a thin pinched appearance of the nose. Whenever the skin closely covers cartilages, as in the ears and nose, a showing through, as it were, of the cartilaginous framework is one of the earliest signs of loss of flesh.

4. Pallor of the cheeks and face as compared with each other and with the malar surfaces.

5. Dilatation of the nostril upon the affected side. This is the case in all pulmonary affections, but especially in the earliest stages of phthisis.

6. The respiration is invariably accelerated, and the disturbance affects expiration as well as inspiration. In certain nervous disturbances the respiration is accelerated, but it is the inspiration only which is at fault.

7. Sinking of the clavicle more upon the affected side than upon the opposite, and giving the appearance of having a very long neck.

8. Great hyperæmia of the pillar of the fauces, present long before the pulmonary disease manifests itself, and continuing until pus is expectorated. When purulent expectoration is established, decomposed pus irritates the throat, and then the other parts usually become hyperæmic.

9. Intense congestion of the throat, early hoarseness, and vomiting are unfavorable symptoms, and indicate enlargement of the

bronchial glands. This vomiting is caused by pressure upon the pneumogastric by the enlarged glands. A large proportion of phthisis cases will tell of having had sore throat for a number of years previous to the development of any chest symptoms.

SALICYLIC ACID AND SALICYLATE OF SODA IN THE TREATMENT OF NEURALGIA (*The Medical Record*, September 1, 1877).—Dr. Descroizilles has employed salicylic acid and salicylate of soda in seven cases of neuralgia, with satisfactory results. The number of cases is too small to permit a judgment to be formed from them of the therapeutic value of the two drugs, but they demonstrate the advantages which the salt possesses over the acid in the treatment of this disease. All the cases were cured, but in the three cases in which the acid was administered it produced a certain amount of deafness. In two of these cases it also exerted an energetic irritant action on the mucous membranes of the digestive and respiratory tracts, and in the other it caused vertigo, general weakness, and well-marked hebetude. The salt did not exert any injurious action either on the mucous membranes or on the nervous system. It was not necessary to give it in as large doses as the acid, and the cure was rapidly effected. From one to five grammes of the salt were given daily, while in one of the cases treated by the acid as much as seven grammes were given in one day. In all the cases the treatment was begun with small doses (one to two grammes), which were increased by a gramme a day until the desired effect was obtained.

SYPHILITIC FATHERS AND HEALTHY CHILDREN (*The Medical Record*, September 1, 1877).—Dr. Güntz, of Dresden, reports six cases in which the fathers of healthy children were the subjects of latent syphilis. In each of these cases at least two years had elapsed between the latest manifestations of syphilis and marriage. In several cases the first child was syphilitic, the second healthy. In all of the cases, within a few years after the birth of their children, the deeper syphilitic lesions manifested themselves in the persons of the fathers, all of whom had had good reasons—among others, the birth of healthy children—to suppose that the disease was eliminated from their system.

NERVE-STRETCHING (*The Lancet*, September 1, 1877).—So much interest is just now attached to the subject of nerve-stretching, especially in its therapeutic application, that we give the following résumé in full:

The operation of nerve-stretching adopted in this country by Callender for the relief of neuralgia, and abroad by Billroth, Nussbaum, and others, in cases of "reflex epilepsy," has recently received further attention on the Continent. Four cases are given in abstract in the last number of M. Hayem's *Revue des Sciences Médicales* (p. 285), and are worthy of reproduction. Two were cases of neuralgia following cicatrization of wounds. The first recorded was a patient of Paul Vogt's, who had wounded the inner aspect of her right forearm by falling upon a cutting instrument. After the wound had healed, there was much impaired movement of the ring and little fingers, attributed to involvement of the flexor tendons in the cicatrix; and at the same time the seat of the scar was exquisitely sensitive, especially at one point, which, on being touched, gave rise to acute pain, radiating into the fingers named. Every movement of the hand was painful; and at first the pain was thought to be due to the presence of a foreign body in the wound. An exploratory incision failed, however, in discovering any such cause for the irritation of the nerve, and the patient's condition remained much the same until, about a year after, Paul Vogt dissected out the ulnar nerve from the cicatricial tissue surrounding it, and, raising it out of its bed, practised stretching of the nerve in both directions. The operation was immediately followed by the disappearance of the neuralgia, and in a few weeks the movements of the hand and fingers were re-established. There was no recurrence of the symptoms three years after the operation. The second case is related by Petersen, in which an extensive wound of the upper and inner part of the left leg was followed, on healing, by very severe attacks of deep-seated pain, again suggestive of the presence of some undetected fragment of metal with which the wound was inflicted. In this case also no foreign body was found on cutting down upon the injured limb; but Petersen ascertained that the posterior tibial nerve was very sensitive, and that there was some extravasated blood in its sheath. Stretching was practised, and with the same fortunate result as in Vogt's case. Two other cases are recorded, both of tetanus. One was a patient of Paul Vogt's, a man sixty-three years of age, who was attacked by tetanus thirteen days after suffering a contused wound of the palm of the right hand. Large doses of opium gave no relief. The scar in the hand was not painful, nor was there any tenderness over the course of the nerves of the arm and forearm, but in the neck the region of the brachial plexus was very tender, and compression in this part induced tetanic spasms. Vogt decided to try the effects of stretching the nerves of the plexus, and with the most happy result. The nerves were exposed in the posterior triangle by an incision along the anterior border of the trapezius three finger-breadths above the clavicle, and their sheath, which appeared inflamed, being laid freely open, each nerve was raised and forcibly stretched. The symptoms of tetanus subsided, and the case terminated in complete cure. The other case was not so successful. The patient, a man forty-five years of age, was attacked with tetanus after impaction of a splinter beneath the toe-nail and exposure

to cold. On the eighth day, after abortive treatment by chloral, the surgeon, Kocher, proceeded to stretch the posterior tibial nerve behind the malleolus, and also the popliteal nerve. The former appeared much injected and thickened, but the popliteal seemed normal. Some diminution in the symptoms followed for a short time, but the patient soon succumbed. The sciatic nerve exhibited several points of injection.

THE CARDIO-VASCULAR PHENOMENA OF EPILEPSY (*The Lancet*, August 25, 1877).—The cardio-vascular phenomena of epilepsy have never, so far as we are aware, been fully investigated. Certain points, such as the condition of the pulse during and after an epileptic fit, and also the changes observed in the retinal vessels, have received some attention, though the statements which have been made as to the latter are contradictory,—some stating that vaso-motor spasmodic contraction is the condition observed, others that turgescence accompanies or follows the fit. And from these observations various theoretical conclusions as to the nature and treatment of epilepsy have been drawn.

Some important experiments have been recently made upon this subject by Dr. Magnan, whose observations on artificial epilepsy are well known. The experiments were made on dogs in which artificial epilepsy had been induced by the injection of absinthe, the epilepsy thus produced being, as M. Magnan has shown, in every respect like ordinary epilepsy as to the phenomena observed. His object was to ascertain the condition of the arterial pressure during the fit, and then to compare the pulse and arterial tension with the muscular contractions. M. Magnan points out that the fatal result which sometimes occurs during an epileptic fit may be due to the heart, either by tetanization during the tonic spasm, or by syncope during the clonic period and lowered arterial pressure. The former mode of death would be analogous to that in digitalis-poisoning, but the short duration of the contracted condition makes it probable that such a result would be extremely rare. These experiments raise some very interesting speculations as to the causation of the phenomena of an epileptic fit, which would be out of place here. But it would be worth while to ascertain whether vaso-motor spasm has not something to do with the increased arterial pressure in "natural," if not in artificial, epilepsy.

CARTILAGINOUS GROWTHS OF THE NOSE (*The Lancet*, August 25, 1877).—Dr. Morell Mackenzie's lecture on cartilaginous nasal growths may be condensed as follows:

Etiology.—These tumors are not very often met with in the nose, but, when they do occur, most frequently affect the young. Originating in some obscure local diversion of nutrition, they are apparently idiopathic formations, and no external causes can be referred to as exercising any influence over their production.

Symptoms.—The usual mechanical symptoms of nasal obstruction accompany cartilaginous tumors. As they advance in size, there is also more or less pain, and often considerable discharge. Extreme deformity of the countenance is generally attendant on this class of growths, as most of them are entirely incapable of yielding in the least to the pressure of surrounding structures, and they sometimes enlarge with great rapidity. They are characteristically globular in shape, and take their origin most frequently from the cartilaginous septum, but also very often from the frontal and ethmoidal cells. In the latter case the upper part of the tumor is usually in contact with the under surface of the brain, thus rendering operative interference impossible.

Pathology.—Cartilaginous tumors vary much in consistence, being occasionally quite soft, but, as a rule, tolerably hard. Microscopically they display considerable diversity of structure, but more nearly approach that of fœtal cartilage. They are very liable to undergo true ossification, whilst, on the other hand, they have also been known to degenerate into sarcoma.

Diagnosis.—This must be ascertained by attention to general symptoms, and by a process of exclusion. They are never pedunculated, seldom ulcerated, and probably present more smoothness of surface, and are more symmetrically globular, than any other intranasal growths.

Prognosis.—Those cases in which the tumor springs from the base of the skull probably always lead to a fatal result. When the growth takes origin from the cartilaginous septum or walls of the nasal fossæ, it may be removed in the usual way; but even in these instances, if it has already attained to any considerable size, there is a great likelihood that denudation of the under surface of the brain has taken place.

Treatment.—No special method of procedure is called for in treating this class of tumors, and they must be removed, when practicable, by the aid of some of the measures already described. One of the characteristics of cartilaginous growths is to cause *absorption* more readily than *displacement* of the surrounding bones. On this account they easily penetrate the cranium, and this occurrence excludes, of course, the advisability of any undertaking for the extraction of the tumor.

PALLIATIVE MEASURES AGAINST WRITER'S CRAMP (*The Medical Press and Circular*, August 1, 1877).—M. Dalby has employed with success on a patient suffering from this troublesome affection, Esmarch's bandage. He applies it to the forearm, and says he thus furnishes a point of support to the muscles, and prevents them from contracting.

M. Paul, for the same purpose, fixes in the ball of the hand a ball of caoutchouc, and says that thus the patient can easily write. These remedies seem simple, and their value may be easily tested.

MISCELLANY.

WE make the following extract from *The Lancet* of August 25, 1877, because it is so peculiarly applicable to a recent contemplated action on the part of one of our local boards:

"*Guardians and Surgical Operations in Workhouses.*—A small minority of the guardians of the poor in the union of Portsea Island have had ere now considerable success in rendering the post of medical officer to their workhouse wellnigh untenable. One of the most energetic of this minority, at a recent meeting of the board, moved a resolution, of which he had given notice, to the effect that whenever the medical officer of the workhouse proposes to perform a surgical operation on an inmate, he shall give sufficient notice to the clerk, so that the latter may inform each guardian of the proposed operation, and that the consent of the guardians shall be obtained before the performance of the operation. This resolution contained a further instruction that in every case in which the death of an inmate follows shortly after the performance of an operation, notice of the same shall be given to the guardians. It is satisfactory to find that this resolution, besides its proposer and seconder, found no support among the Portsmouth guardians, one of whom pointed out that they had no more right to interfere in the case of an operation than they had to call upon the chaplain to submit his sermons to the board previously to preaching them. It is to be hoped there is no board of guardians a majority of which would be willing to accept the responsibility of discussing and deciding upon the proposal of a medical officer to perform an operation upon an in-door pauper. Should such a board of guardians, however, exist, confidence may be felt that the Local Government Board would not confirm a resolution to give guardians the power to hamper medical officers in the performance of their duties, in a manner as dangerous to the inmates of workhouse infirmaries as it would be derogatory to the medical officers themselves."

THE death of Dr. Abram Sayer occurred at Ann Arbor, Michigan, August 6, at the age of 67 years. Dr. Sayer was not only a successful medical teacher and practitioner, but also an accomplished naturalist. From 1842 to 1855 he was Professor of Botany and Zoology in the University of Michigan, having previously had charge of the botanical and zoological department of the Michigan State Geological Survey. In 1848 he was appointed Professor of the Theory and Practice of Medicine in the medical department of the University, and in 1850 was transferred to the chair of Obstetrics and Diseases of Women and Children, which he held until 1875, when ill health forced his resignation.

OFFICIAL LIST

OF CHANGES OF STATIONS AND DUTIES OF OFFICERS OF THE MEDICAL DEPARTMENT U.S. ARMY FROM SEPTEMBER 9 TO SEPTEMBER 22, 1877, INCLUSIVE.

MURRAY, R., COLONEL AND SURGEON.—To be regarded as temporarily awaiting orders to date from his being relieved from charge of the Medical Purveying Depot at San Francisco. S. O. 192, A. G. O., September 10, 1877.

MCPARLIN, THOS. A., MAJOR AND SURGEON.—Relieved from duty in Department of the Missouri, and to report in person to the Surgeon-General. S. O. 193, A. G. O., September 12, 1877.

ALDEN, C. H., MAJOR AND SURGEON.—Relieved from duty in Department of the Columbia, to proceed to New York City, and, on arrival, report by letter to the Surgeon-General. S. O. 193, c. s., A. G. O.

HAPPERSETT, J. C. G., MAJOR AND SURGEON.—Relieved from duty at Wilkesbarre, Pa., and to return, temporarily, to his proper station, Fort Hamilton, N. Y. H. S. O. 216, Division of the Atlantic, September 18, 1877.

WATERS, W. E., CAPTAIN AND ASSISTANT-SURGEON.—Relieved from duty at Mauch Chunk, Pa., and to return to his proper station, Fort Columbus, N. Y. H. S. O. 211, Division of the Atlantic, September 13, 1877.

DE GRAW, C. S., CAPTAIN AND ASSISTANT-SURGEON.—Relieved from duty at Carlisle Barracks, Pa., and to return to his proper station, Oglethorpe Barracks, Savannah, Ga., and there await further orders. S. O. 216, c. s., Division of the Atlantic.

BENTLEY, E., CAPTAIN AND ASSISTANT-SURGEON.—Relieved from duty at Scranton, Pa., and to return to his station, Little Rock Barracks, Ark. S. O. 209, Division of the Atlantic, September 11, 1877.

KIMBALL, J. P., CAPTAIN AND ASSISTANT-SURGEON.—Assigned to duty at Wilkesbarre, Pa., relieving Surgeon Happersett. S. O. 216, c. s., Division of the Atlantic.

COWDREY, S. G., CAPTAIN AND ASSISTANT-SURGEON.—Relieved from duty at Wilkesbarre, Pa., and to report by letter to Commanding General, Department of the Gulf, for orders. S. O. 211, c. s., Division of the Atlantic.

DICKSON, J. M., CAPTAIN AND ASSISTANT-SURGEON.—To proceed to Jackson Barracks, La., close his money and property accounts at that station, and return with least delay practicable to his post at Indianapolis, Ind. S. O. 216, c. s., Division of the Atlantic.

EWEN, C., CAPTAIN AND ASSISTANT-SURGEON.—Relieved from duty at Easton, Pa., and assigned to duty with U. S. Troops at Scranton, Pa. S. O. 216, c. s., Division of the Atlantic.

MOSELEY, E. B., FIRST-LIEUTENANT AND ASSISTANT-SURGEON.—Relieved from duty at Scranton, Pa., and to report by letter to Commanding General, Department of the Gulf, for orders. S. O. 211, c. s., Division of the Atlantic.

SKINNER, J. O., FIRST-LIEUTENANT AND ASSISTANT-SURGEON.—Relieved from duty at Reading, Pa., and assigned to temporary duty at Carlisle Barracks, Pa. S. O. 216, c. s., Division of the Atlantic.

CRAMPTON, L. W., FIRST-LIEUTENANT AND ASSISTANT-SURGEON.—Relieved from duty at Mauch Chunk, Pa., and to report by letter to Commanding General, Department of the Gulf, for orders. S. O. 211, c. s., Division of the Atlantic.

TAYLOR, M. E., FIRST-LIEUTENANT AND ASSISTANT-SURGEON.—Relieved from duty at Wilkesbarre, Pa., and to report by letter to Commanding General, Department of the Gulf, for orders. S. O. 211, c. s., Division of the Atlantic.

INDEX.

Abnormal appetite, 480.
Abscess, cerebral, 531, 549.
  new treatment of, 142.
  post-sternal, 426.
  pyæmic, 597.
Acne, 107, 383, 478.
Agnew, D. Hayes, 442.
Algæ of Pontine marshes, 383.
Allen, Harrison, 99.
Allis, Oscar H., 460, 485.
American Medical Association, 9, 23, 445, 449.
American Medical College Association, 491.
Ammetropia, 266.
Ammoniæmia, 174.
  puerperal, 302.
Anæsthetics, action of, 7.
Anæmia, blood in, 80.
  chronic, 489.
  progressive pernicious, 151, 418, 444.
Anatomical arrangement of tissue, 481.
Aneurism of anterior tibial artery, 33.
  of hepatic artery, 527.
  of lower extremities, 43.
  of vertebral artery, 151.
Angina, carbolic acid in, 248.
Anhidrotics, 133.
Antagonism, 363.
Anthrax, 204, 613.
Antimony, action of, 106.
Antiseptic treatment of wounds, 59, 132, 368, 407, 620.
  a new, 80.
Aorta, aneurism of, 13, 72, 137, 160, 551, 570.
  bruit in dilatation of, 151.
  embolism of, 272.
Aortic valvular disease, 516.
Apex, pneumonia of, 165.
Aphthæ, 612.
Apomorphia, 621.
Aquapuncture, 297.
Arm, amputation of, 425.
Artery, constrictor, 502.
Ascarides lumbricoides, 297.
Ascites, chylous, 47.
Ashhurst, John, 123.
Aspiration, 33.
Astringents, action of, 107.
Athetosis, 248.
Atomizer in eye diseases, 235.
Atrophy, infantile, 367.
Atropia, 227.

Baer, Ernst von, 192.
Bartholow, Roberts, review, 67.
Baths, influence of, upon blood-pressure, 490.
Beach, H. H. A., 487.
Beard, Geo. M., 194.
  review, 19.
Bennet, J. H., Nutrition in Health and Disease, review, 260.
Benzoin, 407.
Berlin, physicians of, 216.
Bichromate of potassium, 489.
Bile-pigment, tests for, 191.
Biliary secretion, influence of water on, 541.
Biliousness, 433.
Birth-rate, period of maximum, 559.
Bladder, inflammation of, 595.
Bladder, injection of liquids into, 489.
  irritability, 589.
  papilloma of, 45.
Blepharitis, 266.
Blood corpuscles, 43.
  flow of, 142.
Bloodless operation, 261.
Boils, treatment of, 176.
Bone, inflammation of, 32.
  percussion, 5.
Bones, preparation of, for museum, 192.
Brain, after-effects of injury of, 601.
  conduction in, 129.
  injuries of, 70, 126, 603.
Brandy from sawdust, 192.
Braune, Wilhelm, review, 308.
Bravo case, 59.
Breech presentations, 313.
Bright's disease, 413, 429, 513.
  deafness in, 348.
  jaborandi in, 316.
  opium in, 145.
  vessels in, 371.
Bristowe, J. S., review, 115.
Bromides, 404.
Brown, Bedford, 577.
Bruen, E. T., 316.
Brunton, T. Lauder, review, 431.
Buboes, 22.
Bulbar paralysis, 366.
Burnett, S. M., 244.
Butylchloral, action of, 489.

Cæsarean section, 8, 22, 183.
Calabar bean as a lactagogue, 96.
Calculus, 14, 151, 310, 408.
Cancer of lymphatics, 475.
Carbolated camphor, 56.
Carbolic acid, 58, 568.
  in synovitis hyperplastica granulosa, 32.
Carbonic acid, excretion of, by skin, 322.
  anhydride, 380.
Carcinoma following epithelioma, 305.
  of breast, 476.
  of stomach, pancreas, etc., 476.
Carotid artery, ligature of, 359.
Carr, A. P., 291.
Carson, Joseph, 206.
Catarrh of bladder, local treatment of, 539.
  suffocative, 193.
Catheter, removal of broken, 365.
Cell doctrine, 254.
Cellulitis, 424.
Centenarian, 120, 288.
Centennial, 34, 35, 615.
Cerebral convolutions, atrophy of, 490.
  embolism, 83, 514.
  exhaustion, electric baths in, 83.
  localization, 209, 273, 300.
  thrombosis, 112.
Cerebro-spinal sclerosis, 49.
Cerebrum, anatomy of, 99.
Cervical sympathetic, wounds of, 204.
Cervix, division of, 446.
  uteri, laceration of, 211.
Chancre of cervix uteri and vagina, 568.
Chancres, treatment of, 265.
Chemistry, Attfield's, review, 45.
Chenopodium, oil of, 527.
Chest, cancer of, 237.
  pains, 432.
Childbed, pathology of, 507.
Chloral, 21, 134, 215.
  poisoning, 175.
Chloroform asphyxia, 431.
  death from, 166.
  in sciatica, 323.
  narcosis, venous pulse in, 443.
  test of purity, 383.
Chorea, 106, 191, 340, 354, 382, 416.
Cinchona trees, 144.
Clavicle, luxation of, 117.
Colchicum, action of, 116.
Cold bath in typhoid fever, 95.
Cold, local action of, 323.
  taking, 175.
  treatment of, 233.
Collins, S. B., 173.
Color-blindness, 144, 232.
Compressed air, 22.
Constipation, 296.
Cooke, Thomas, review, 213.
Cormack, Sir John Rose, review, 164.
Corpora quadrigemina, 226.
Corrosive sublimate, formation of, in the system, 599.
Cotton dressings, 368.
Cotton, W. G., 147.
Cotton-root, 560.
Cranial fractures, 175.
Croton oil, 443.
Croup, 1, 255.
Cutter, Ephraim, review, 65.
Cyanide of zinc, 349.

Damiana, 94.
Darby, J. T., 565.
Davis, J. D., 270.
Delirium tremens, albuminuria in, 152.
Dermatological Society, American, 618.
Deshaies, Alfred, 608.
Diabetes, 58.
Dialyzed iron, 381, 489.
Diarrhœa, chronic, 420.
Digitalis, 382.
Diphtheria, 1, 7, 53, 96, 116, 167, 380, 477, 478, 503, 516, 583.
Diplomas, bogus, 264.
Dispensaries in England, 182.
Dowell, Greensville, reviews, 260, 284.
Drops, table of, 23.
Drugs, spinal action of, 169.
Drunkenness in Peru, 96.
Duhring, Louis A., 97, 320.
  review, 282.
Duhring, Miss, review, 17.
Dulles, C. W., 79, 603.
Duodenum, laceration of, 599.
Dwight, Thos., review, 93.
Dynamite, 419.
Dysentery, 348.
Dysmenorrhœa, 446.

Ear, tumor of, 92.
Eczema, treatment of, 20.
Elbow, excision of, 285.
Electrolysis, 127, 166.
Elephantiasis of penis, 140.
Embolism, 214, 514.
Emphysema, 598.
Encephaloid of breast, 54.
Endocarditis, 609.
  blennorrhagica, 598.
Endoscope, a new, 32.

Enteritis, membranous, 597.
Epiglottis, gangrene of, 526.
Epilepsy, albuminuria in, 151.
circulation in, 623.
treatment of, 226, 366, 519.
Epileptic attacks, apomorphia in, 540.
Epithelioma, 17, 104, 517, 519.
Ergot, 116.
Eruptions during septicæmia, 518.
Erysipelas of mucous membrane, 174.
Ether, death from, 480, 502.
hypodermic injection of, 489.
Ethereal oil, effects of, 80.
Eucalyptus globulus, 23, 480.
Expectoration, difficult, position in, 512.
Experts, duties and rights of, 156, 324.
Extra-uterine pregnancy, 95, 136.
Eye disease, atomizer in, 78.

Face, epithelioma of, 97.
paralysis of, 580.
Femoral artery, concealed fatal hemorrhage of, 147.
vein, thrombosis of, 525.
Femur, intracapsular fracture of, 524.
ulceration of, 305.
Fibroid tumor of the uteri, 590.
of left upper jaw, 595.
Fibromyomata of the uterus, 79.
Fistula ani in tuberculous persons, 541.
Flint, Austin, 609.
Food, adulteration of, 87.
Foot-ball, 131, 155.
Foramen ovale, partially closed, 498.
Foster, M., review, 283.
Fothergill, J. Milner, 103, 436.
review, 307.
Foulkrod, John J., 560.
Fractures, plastic dressing in, 21.
treatment of, 323.
Fuchsine, 150.
Fungus in urine, 535.

Gant, F. J., review, 141.
Gastrotomy, 165, 212, 468, 503.
Gelsemia, 289.
Gelseminic acid, 289.
Gelseminum sempervirens, 96.
Genu-pectoral position, 456.
Gerhard, George S., 49.
Germination, delayed, 59.
Gibney, V. P., 102, 555.
Gillenia stipulacea, 318.
Gingivitis, puerperal, 348.
Glossitis, 118, 190.
Glottis, spasm of, 355.
Glycerine, poisonous action of, 81.
Gokhru in incontinence and spermatorrhœa, 95.
Gonorrhœa, 117, 349.
Gouty delirium, 166.
Great Britain, medical charities of, 328.
Green, Traill, 52.
Gross, Prof. S. D., 103.
review, 113.
Gross, S. W., 553.
Gull, Sir William, 59.
Gynæcological Society, Transactions of, 477.

Hæmatoma of anterior wall of vagina, 539.
Hæmaturia, 45.
Hæmoptysis, subcutaneous injections in, 567.
Hamilton, A. McL., 31.
Hand, gunshot wound of, 79.
Harvey, William, 192.
Hay, George, 488, 559.
Haynes, Francis L., 363.
Headache, therapeutics of, 406.
Health officers, visiting, 615.
Heart, anomaly of, 13.
dilatation of, 109.
disease of, in albuminuria, 234.
relation to injuries, 321.
diseases, 375, 416, 429.
electrical phenomena, 296.
fatty degeneration of, 609.
thrombosis of, 577.
Heat centre, 30.
Hemiatrophia facialis, 323.
Hemorrhage, arrest of, 323.
Hemorrhage from genitals, 277.
Hemorrhoids, 191.
Hernia, radical cure of, 214.
reduction of strangulated, 46.
strangulated, aspiration in, 95.
Herpes zoster, 128.
Hiccough, 613.
Hip, dislocations of, 5, 70, 447, 507.
Histology, Frey's, review, 45.
Homœopathic tinctures, 21.
Homœopathy, 71, 130, 216, 227, 449.
Hospitals, 63.
Hull, George S., 561.
Humerus, excision of head of, 103.
Hutchinson, James H., 413, 531.
Hydrobromic acid, 31, 103.
Hydrocele, carbolic acid in, 96.
Hydrophobia, 116, 128, 215, 287, 335, 617.
Hymen, unruptured, 284.
Hyoscyamia, 393.
Hypodermic injections, 274.
Hypospadias, 310.
Hysterical contractions, 85.

Ileus, cure of, 590.
Image, persistent, on retina, 151.
Incontinence of urine, gokhru in, 95.
Ink, 384.
Innutrition, maladies of, 36.
Insane criminals, 254.
Insane, Pennsylvania law, 383.
Insanity from chloroform, 261.
in America, 82, 302.
Intestinal obstruction, 16, 81, 188, 189, 248, 280.
Intussusception treated by abdominal section, 448.
Iodide of potassium, 22.
of starch, 153.
Iodine, new preparation of, 455.
poisonous action of, 227.

Jaborandi, 105, 316, 433.
Jacobi, A., 416.
Jaundice, 149, 611.
Jaw, resection of upper, 115.
Jones, Joseph, review, 20.

Katatonia, 353.
Keating, John M., 433, 465.
Keen, W. W., 145.
Kidney, cystic, 430.
effect of blood-pressure on, 322.
large white, 497.
tubercular degeneration of, 596.
King, W. S., 512.
Knee, dislocation of, 270.
Kollinger, A. H., review, 114.

Lactic acid as a hypnotic, 176, 575.
Landis, H. G., 559.
Landisberg, M., 78, 507.
Lansing, E. S , 5.
Laparotomy, 79.
Larynx, anæsthetization of, 106.
catheterization of, 7.
extirpation of, 6, 287.
Lautenbach, B. F., 30, 268, 296, 387.
Laycock, Thomas, 36.
Lead, glycerole of subacetate of, 20.
Lead-poisoning, 149.
Lee, B., 75, 511.
Leg amputation for necrosis, 279.
ulcers, 381.
Legislation, medical, 177, 542.
Leukæmia, 7, 166.
Levis, R. J., 400.
Libel, 205.
Linn, G. Wilds, 361.
Lipoma, 140.
Lippincott, J. A., 25.
Lithopædion, 26.
Lithotomy, 291, 468.
Lithotrity, 215.
Liver, hydatids of, 43.
new function of, 387.
tuberculosis of, 176.
wandering, 262.
Lymphadenoma, malignant, 567.
Lymphangiectasis, 57.

Macomber, N. G., 535.
Madden, T. M., 93.
Madelung, O. W., review, 19.
Magnetism as a destructive force, 606.
Maisonneuve's caustic arrows, 287.
Malgaigne's hooks modified, 400.
Mammary tumor, 333.
Maternal impressions affecting the fœtus, 73, 92, 121.
Meadows, Alfred, review, 68.
Measles, 345.
Medical profession in America, 154, 163.
schools, military and naval, 325.
students in England, 48.
in Germany, 48.
Medulla oblongata, apoplexy of, 366.
Meigs and Pepper, review, 308.
Meningitis, cerebro-spinal, 380.
Menstrual neuroses, 353.
Mercury in urine, 273.
Metric system of weights, 178.
Milk diet, 167.
ewes', 358.
syphilis by, 119.
to arrest, 420.
Mills, C. K., 564.
Mistura alba, 384.
Mitchell, S. W., 246.
Molluscum contagiosum, 109, 613.
Monobromide of camphor, 227.
Monti, Alois, 193, 516.
Morris, J. Cheston, 415.
Morton, T. G., 54, 173.
Murray, J. Monro, 539.
Muscle, fatty degeneration of, 334.
Muscles of cutaneous glands, 541.
Mushrooms, poisoning by, 39.
Myalgia, 199.

Nævus, pigmental, 587.
vascular, 586.
Nancrede, C. B., 481.
Napheys, G. H., 188.
Neck, dislocation of, 165.
Nerve-stretching, 107, 216, 296, 622.
Nerves, conducting power of, 268.
electrical properties of, 249.
resection of, 81.
Nervous action, velocity of, 346.
diarrhœa, 167.
diseases, their asserted increase, 340.
system, pathological anatomy of, 187.
Neuralgia, 246.
facial, 349, 359.
rheumatic, 349.
Neuritis, traumatic, 564.
Nicotin, 363, 389.
Nipples, fissure of, 239, 311.
Nitrate of sodium, 348.
Nitrite of amyl, 456.
Nodules in liver, 598.
Nose, tumors of, 588, 623.

Œsophagus, foreign body in, 6, 444.
resection of, 621.
O'Farrell, Gerald D., 125.
Oil of tansy, poisoning by, 467.
Ointments, dispensing of, 319.
Ophthalmological Congress, report of, 334.
Opium-poisoning, 145.
Osteitis, 305, 417.
deformans, 132.
Osteo-sarcoma of femur, 476.
Osteotomy, 7.
Otitis media, 570.
Ott, I., 289.
Ovarian cyst, 332.
Ozæna, 590.

Packard, John H., 126, 201.
Pancreas, exsection of, 83.
Pancreatic induration, 496.
Papilloma of the bladder, 45.
Paralysis agitans, 262.
Paracentesis thoracis, 54, 137, 385, 505, 527, 529.
thoracis followed by death, 95.
Parenchymatous injections, 22, 32, 108, 568.
Paresis, progressive, 256.
Patella, fracture of, 173.
Paullinia sorbilis, 406, 444.
Peanuts, oil of, 71.
Pediculi, 321.

Pepper, Wm., 148, 241, 385, 409, 505, 529.
Pericarditis, 597, 611.
Pericardium, paracentesis of, 69.
Perineal section, clinical lecture on a case of, 457.
Peri-nephritic abscess, 52.
Peri-nephritis, 302.
Peritonitis, 214, 310.
Pessary, intra-uterine, 5.
Pharmacopœia, United States, 250, 275.
Pharynx, cauterization of, 382.
injury to, 142.
Phenic acid, 551.
Phosphates, 203, 369.
Phosphide of zinc, 227.
Phosphorus, 166, 420.
Phthisis, 25, 85, 159, 489, 621.
syphilitic, 46.
Physician's Call-Book, Walsh's, review, 260.
Physiology, Carpenter's, review, 94.
Picric acid, 311, 367.
Piles, 286, 296.
Pilocarpin, 144, 366, 519.
Pityriasis rubra, 585.
Playfair, W. S., review, 68.
Pleura, cancer of, 237.
Pleural effusion, 381.
Pneumonia, embolic, 257.
Pneumothorax, 369, 409.
Podophyllin, 296.
Poggendorff, J. C., obituary, 312.
Poisons, post-mortem imbibition of, 112.
Polk, C. G., 608.
Polypi, laryngeal, 502, 551.
nasal, 367, 588.
Pons, tumor of, 30.
Pontine marshes, 383.
Pooley, J. H., 365.
Popliteal aneurism, 238.
Position of fœtus, unusual, 415.
Potassium iodide, poisoning by, 94.
Pott's disease, 553.
Pregnancy, extra-uterine, 88, 185, 241.
relations of, to surgical affections, 589.
Preparations, making of dry, 311.
Prescribing by weights, 350.
Pressure, intermittent, in aneurism, 309.
Prolapsus recti, 516.
Protagon, 608.
Pruritus vulvæ, 11.
Psoas abscess, 132.
Public Health Reports, 189.
Puerperal convulsions, 362
fever, warm bath in, 108.
Pulmonary artery, thrombosis of, 577.
syphilis, diagnosis of, 38.
valves, anomaly of, 474.
Pulse, variations and indications of, 28, 40, 41.
Purpura, ergot in, 189.
Pyæmia, 420.
Pyopneumothorax, 400.

Quadriceps tendon, rupture of, 174.
Quinia, bromhydrate of, 444.
solubility of, 418.
Quinsy, 167.

Rachitis, 7.
dogs' milk in, 48.
Radcliffe, S. J., 580.
Rattlesnake-bite, 527.
Raw beef, administration of, 192.
Rectal cancer, 14, 442.
colotomy for, 173.
Rectum, excision of, 442.
Remsen, Ira, review, 619.
Rest for Women, review, 499.
Retinal apoplexy, 419.
Revolution, medical service of the, 110.
Rhea Barton Professorship, 614.
Rheumatism, acute articular, 81.
salicylic acid in, 261.
Rice, cooking of, 359.
Roosa, Dr. St. John, Ophthalmic and Otic Memoranda, 260.

Sacrum, caries of, 595.
Sager, Abram, 624.
Sailors, color-blindness in, 144.
Salicin, 119, 308, 312.
Salicylates, 51, 541, 622.
Salicylic acid, 107, 109, 144, 287, 384, 444, 622.
Sanitary condition of Russian and Turkish armies, 480.
Santonin, 72.
Scabies, treatment of, 70.
Scarlatina, 57, 382.
Schaeffer, E. A., review, 334.
School hygiene, 591.
Schweig, Geo. M., review, 43.
Sciatic nerve, section of, 117.
Sciatica, 238, 246, 323.
Scoliosis, 417.
Scrofula, 348.
Scurvy, 575.
in English Arctic Expedition, 264.
Sebaceous cyst, 331.
Seguin, E., 121.
Seguin, E. C., review, 334.
Seminal discharge, gokhru in, 95, 247.
Sensibility, recurrent, 575.
Shoulder, luxation of, 153, 368.
presentation, 109.
Sibson, Francis, 35.
Skin diseases, india-rubber cloth in, 401.
Skull, compound fracture of, 123.
compound depressed fracture of, 22, 201, 366, 599.
Snake-bite, 120.
Sophora excelsa, 510.
Sophoria, 510.
Spectacles, 244.
Spina bifida, 416.
ventosa, 417.
Spinal action of drugs, 169.
cord, conduction in, 129.
irritation, 555.
paralysis, 102.
Spine, curvature of, 75, 355, 358, 511.
fracture of, 132.
Spleen, cancer of, 286.
removal of, 613.
rupture of, 118, 349, 478.
Sterility, 446.
Sterno-mastoid spasm, 359.
Stewart, W. S., 1.
Stomach, cancer of, 64, 331, 426, 573.
washing of, 310.
Strangulated hernia, 460, 485.
Stricture of urethra, 115, 263, 394.
Strychnia, 363.
poisoning, 297.
Suesserott, O. L., 171.
Sulphide of calcium, 70.
of carbon, 56.
Sulphurous acid, 455.
as a disinfectant, 190.
Surgeon-General, Report of, 189.
Synovitis, 32, 54.
hyperplastica granulosa, treatment of, 32.
Syphilis, 185, 229, 282, 337, 350, 478, 479, 500, 613, 622.
pulmonary, 38, 46.
transmission of, 47.

Tænia, 357, 517.
Tannic acid, 108.
Tape-worm, 357, 517.
Tattooing, 350.
Taylor, W., 73.
Telangiectasis, 320.
Tellurium, 60.
Temperature, effects of reduction of, 58.
Tendon, suture of, 335.
Test-paper, 72.
Tetanus, 72, 216, 611.
Therapeutics, Napheys's, review, 188.
Thornton, W. P., review, 141.
Thrush, 612.
Thymol, 401.
Tibia, compound fracture of, 46.
Tinea versicolor, 320.
Tobacco-poisoning, 271.
Torsion, 57.
Trachea, peanut in, 304.
Transfusion, 165, 167, 226, 357, 420, 489.
Trommer's test, fallacy of, 488.
Tuberculosis, 306, 598.
Turner, W. Mason, 147, 583.
Typhoid fever, 65, 95, 116, 119, 148, 152, 276, 287, 383, 500.
Twin abortion, 330.

University of Pennsylvania, medical education at, 402.
Urea, elimination of, 239.
Urethra, injuries of, 539.
rupture of, 38, 239.
Urine, influence of drugs on, 274.
mucus in, 108.
Urticaria, 383.
Uterine ebb, 232.
hemorrhage, 203, 264.
Uterus, cancer of, 8, 377.
mucus on the mouth of, 190.
removal of, 621.
tumors of, 79, 171, 281, 330.
Uterus and vagina, absence of, 380.

Vaccination, 222.
Vagina, cancer of, 8, 139, 377.
tumors of, 600.
Valvular heart disease, 374.
Vanderbeck, C. C., 246.
Van Harlingen, Arthur, 319.
Vansant, John, 606.
Van Valzah, W. W., 271.
Variola, 57.
Vaso-motor nerves, 612.
Veins, entrance of air into, 418.
Vena porta, compression of, 149.
Venereal diseases, treatment of, 179, 252.
Version, fracture of thigh in, 151.
Vertebral artery, 125.
Visceral syphilis, 277, 309.
Vision, disturbance of, 272.
Vitreous body, air-bubbles in, 502.
Vocal cords, voice without, 502.
Vomiting of phthisis, 369.
Vulva, lupus of, 566.

Walsh, Dr., 260.
Warm bath, 108.
Weather, relation of, to catarrhal diseases of children, 465.
Welch, Wm. M., 222.
Wetherill, H. M., 318.
White, J. Wm., 394, 457.
Whooping-cough, 37, 273, 285.
Wilson, J. C., 199
Wine colored by fuchsine, to detect, 150.
Wood, H. C., 169, 510, 601.
Woodhull, A. A., review, 20.
Writer's cramp, 194, 217, 623.
Wyman, Morrill, review, 19.
Wythe, J. H., review, 307.

Xiphoid cartilage, dislocation of, 212.

Yellow fever, 256.
in Savannah, 359.

Ziemssen's Cyclopædia, reviews: vol. xi., 45; vol. vi., 284.